SPECTRUM Software Release Notice

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Software Release Notice

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Overview

The SPECTRUM Software Release Notice (SSRN) accompanies each copy of the release package for version 6.5 of SPECTRUM.

Purpose of this Document

The SSRN is intended to alert the user to the following:

- product enhancements or changes
- corrected and known anomalies
- updates or corrections to related documentation

Updates to this information will be issued and packaged with each subsequent release/revision of this product. It is strongly recommended that you read the accompanying document each time you receive an updated version of the software so that you will be aware of any changes in the product or the associated documentation.

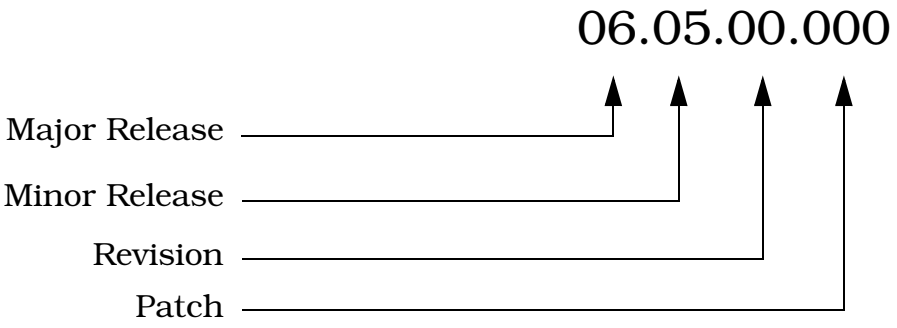
How This Manual Is Organized

The following outlines the organization of the SPECTRUM Software Release Notice for SPECTRUM 6.5.

Section	Description
Overview	The contents and purpose of the SSRN.
New Features and Functionality	Describes the new features.
Release Advisories, Special Considerations	Describes late-breaking information, or information that is mandatory or useful for the successful operation of SPECTRUM.
Corrected and Known Anomalies	Lists and describes the anomalies and problems in SPECTRUM core products, applications and Management Modules that have been *corrected* since the last major release of SPECTRUM. Lists and describes the known core product, applications and Management Module anomalies and problems that were identified and noted in this release of SPECTRUM which will be addressed or corrected in post-release revisions.

Version Control

SPECTRUM's numbering scheme for version control consists of up to four numeric fields as shown in the following diagram.



Major Release - Increments to the number in this field represent major changes in the product's design, functionality, or user interface. Major releases are planned well in advance and occur no more frequently than once per year.

Minor Release - Minor releases are scheduled product upgrades that provide new or enhanced features but do not represent functionality changes as significant as those involved in a major release. Minor releases may occur one or more times per year.

Revision - This field is incremented for subsequent revisions to a release and is reset to zero for each new major/minor release.

Patch - This field, previously used for internal tracking of individual builds under a particular revision and not usually visible to the customer, assumes special importance to the extension developer. The value of this field must be zero for the first release of a Management Module or application and must be incremented to a higher value.

New Features in SPECTRUM 6.5

This section lists new features and functionality in SPECTRUM 6.5.

Fault Isolation Improvement

The new **Impact Scope** view and **Impact Severity** rating on alarms reveal a way to view the impact a fault has on a network.

When a red “DEVICE HAS STOPPED RESPONDING TO POLLS” alarm is generated, the Device_Criticality of the red model and all the gray models in the fault domain are summed to produce the **Impact Severity** of the alarm. The impact severity of each red “Contact Lost” alarm is now displayed in the main Alarm Manager window.

The red alarm with the highest impact severity represents the problem that should be given highest priority.

To find out which managed devices have been impacted by a red “Contact Lost” alarm, the user can launch the **Impact Scope** view. This view shows a list of all the gray models in the fault domain. The user may sort these models by Device_Criticality to see the most important devices at the top of the list.

Performance Improvement

The following improvements in SPECTRUM performance now are obtainable with the release of SPECTRUM 6.5:

On Solaris: 50-100% capacity gain.

On Windows NT: 150-200% capacity gain.

“Capacity gain” refers to the number of devices managed by a single SpectroSERVER.

In SpectroWATCH, performance has been improved resulting in greater device management capacity.

Web Operator 6.5

A redesigned user interface adds color to application views, provides new images and fonts, and rearranges menus to increase work space. At the top of the Web Operator interface, an application menu displays links to Foundation or Suite applications. The Alarm Presentation Editor and Event Presentation Editor have been moved inside Alarm and Event Reports. The logout link, update password link, and Quick Search have been moved to the top right of the Web Operator interface.

You also now have the ability to customize Web Operator globally or for individual users. In all applications, table columns can be rearranged, added, removed, and sorted. In Model Search, search types can be added or removed from the search list, and search results can be customized to show user-specified data.

An upgrade to version 1.3.1 of Java 2 Standard Development Kit (SDK) and Java 2 Runtime Environment (JRE) improves Web Operator performance, and the availability of Java SDK and Java JRE on the SPECTRUM application CD simplifies installation. The Java 2 SDK can be installed from the application CD and the Java JRE can be downloaded from the machine where Web Operator is installed. These components no longer need to be downloaded from the Sun Web site.

Ability to clear, acknowledge, or unacknowledge multiple alarms with a single action.

The Web Operator version number now coincides with the SPECTRUM version (version 6.5).

Other enhancements include better indication of alarms, MySQL upgrade, ability to show or hide Model Browser data, and new documentation.

Gateways to Other Management Systems

Southbound Gateway

SPECTRUM's new Southbound Gateway functionality now integrates Simple Network Management Protocol (SNMP) and non-SNMP data from third-party sources. Often these third-party sources are other network management applications that specialize in monitoring specific aspects in a computing environment. With Southbound Gateway, you can centralize network management allowing SPECTRUM to capture and display event data from other systems. The data is then organized into SPECTRUM event and alarm data as appropriate and displayed within Alarm Manager, SpectroGRAPH, and other SPECTRUM viewing applications.

For more information on how Southbound Gateway can be used with any incoming data formats please refer to the ***Southbound Gateway Toolkit Guide***.

Transaction Language 1

SPECTRUM also adds support for the Transaction Language 1 protocol (TL1). The TL1 Gateway translates autonomous messages originating from a TL1 device into SPECTRUM events, and alarms. The TL1 protocol is heavily used in the telecommunications industry's optical and broadband technologies.

SPECTRUM Modeling Gateway

The SPECTRUM Modeling Gateway is a command line utility that enables the import of network topology information from XML input files into the

SPECTRUM knowledge base. The gateway includes a Document Type Definition (DTD) that defines the XML elements and attributes. An XML file is created by the user that describes devices, ports, and connections on a network. This XML file can then be imported to create new topology data in SPECTRUM, update existing data, or remove incorrect data.

Frame Relay Manager

Better connectivity between Frame Relay devices is now available by extending modeling to support new Management Information Bases (MIBs). These MIBs include RFC2115-MIB, CISCO-FRAME-RELAY-MIB, and the WELLFLEET-FR2-MIB.

The new MIB support also enables more information to be collected that pertain to individual circuits with a new table view that lists the device's Data Link Connection Identifier (DLCI) ports and the far side devices, interfaces and DLCIs to which they are connected.

When connection discovery is not possible, connection data can be imported from a text file which specifies Frame Relay, Asynchronous Transfer Mode (ATM), or Hybrid connections.

AutoDiscovery Improvements

Virtual LAN (VLAN) support for Riverstone and Extreme Discovery Protocol (EDP) devices has been added. AutoDiscovery has been enhanced to query the Extreme Management Module to retrieve this information, and to map Extreme to Extreme connectivity using EDP tables.

AutoDiscovery is now a client of SPECTRUM's new SNMP service. This service is transparent to AutoDiscovery users and offers several advantages over the previous methodology, especially in certain firewall environments where applications that generate SNMP requests have to be installed on a trusted server. With the new SNMP service, SNMP requests are still sent from the trusted server, but AutoDiscovery itself can be run from a remote system.

Remedy AR System Gateway Improvement

A new “bi-directional” capability has been incorporated in the Remedy gateway. When a trouble ticket is submitted to Remedy either from the gateway or manually, the ID that Remedy assigns the trouble ticket will be populated into the trouble ticket ID attribute within SPECTRUM.

In addition, when a trouble ticket that originated from a SPECTRUM alarm is closed within Remedy, the alarm is cleared within SPECTRUM (if that alarm is clearable, or if it has not already been cleared).

Device Maintenance Mode

Maintenance Mode refers to the ability to temporarily suspend management of a particular device or set of devices in SPECTRUM. This suspension enables you to avoid SNMP polling and generating alarms and events when a device is down for scheduled maintenance.

Ping and Telnet from SpectroSERVER

Ping and telnet invocations can now be routed through SpectroSERVER as well as directly from the SpectroGRAPH host. This solution enables ping and telnet to work when the only IP address allowed through your firewall is SpectroSERVER’s IP address. Firewall configuration is simplified when all ping and telnet requests from SPECTRUM applications are routed through the SpectroSERVER host.

Remote Display Now Supported

SPECTRUM now supports remote display of SpectroGRAPH using the version of Exceed’s X-Server that is included with SPECTRUM software. X-Windows will be utilized to display SPECTRUM applications from one workstation to another workstation. The following display variations are supported: Solaris to Solaris; Solaris to NT, and NT to NT.

New ATM Circuit/Path View

A new view, launched from the context of Virtual Circuit Link (VCL) models is now available through SpectroGRAPH and various non-Web SPECTRUM applications. Typically, this view is accessed from DevTop views or from Search Manager results. The view displays a graphical representation of the ATM circuit or path that traverses a given link. All VCLs that make up a particular ATM Permanent Virtual Circuit/Switch Virtual Circuit (PVC/SVC) are displayed in a path. In addition to VCL and device information, the view shows all available logical sub-interface layers that make up the interface “stack” on both ends of each link in a chain.

Release Advisories and Special Considerations

This section provides any late-breaking information, or information that is mandatory or useful for the successful operation of SPECTRUM.

Aprisma Rebranding

With this release, most references to “Cabletron” in documentation text, screen captures, etc., were rebranded to “Aprisma.” In cases where a company reference is made, “Aprisma” now appears. In references to Cabletron-built devices, “Cabletron” will remain.

Although we expect most documentation to reflect these changes, there could be instances where the rebranding effort has not yet been completed.

Alarm Manager Stale Alarms Not Available in AlarmNotifier

Stale alarms appear in Alarm Manager when SpectroSERVER, SpectroGRAPH, and Alarm Manager are shutdown and restarted. Stale alarms do not appear under AlarmNotifier. For a discussion on the nature and implications of stale alarms, please refer to the ***Enterprise Alarm Manager User’s Guide***.

Sound on Redirected Remote Display No Longer Supported

The ability to use sound in the Alarm Manager application when it is remotely displayed on any host other than the host system Alarm Manager is installed on is no longer supported in SPECTRUM 6.5.

Turning Device Polling Off

With the release of SPECTRUM 6.0.3 and 6.5, when you set a device's Polling Interval to zero (0) its Polling Status will automatically be set to False in the Model Information View. Thus polling on the device will be turned off.

In both SPECTRUM 6.0.3 and 6.5, setting the device's Polling Status to False will turn polling off.

However, in SPECTRUM 6.0.2 (and prior releases) setting the Polling Interval and Polling Status at the same time will not turn off polling. SPECTRUM patches are available for this problem.

If you have upgraded from SPECTRUM 6.0.0, 6.0.1 or 6.0.2 to SPECTRUM 6.0.3/6.5 and the model has Polling Interval set to zero and a Polling Status set to True, it is not guaranteed the device will not be polled since polling is now solely controlled by the Polling Status attribute.

SPECTRUM 6.0.3 Patches

SPECTRUM 6.5 includes the following set of SPECTRUM 06.00.03 software patches that enhance certain areas of SPECTRUM.

06.00.03.001
06.00.03.002
06.00.03.003
06.00.03.004
06.00.03.005
06.00.03.006
06.00.03.007 (Obsoleted by 06.00.03.016)

06.00.03.008
06.00.03.009
06.00.03.010
06.00.03.011 (Obsoleted by 06.00.03.024)
06.00.03.012
06.00.03.013
06.00.03.014 (Obsoleted by 06.00.03.018)
06.00.03.015 (Obsoleted by 06.00.03.023)
06.00.03.016
06.00.03.017
06.00.03.018
06.00.03.019
06.00.03.020
06.00.03.021
06.00.03.022
06.00.03.023
06.00.03.024
06.00.03.025 (Obsoleted by 06.00.03.035)
06.00.03.026
06.00.03.027
06.00.03.028
06.00.03.030
06.00.03.031
06.00.03.032
06.00.03.033
06.00.03.034 (Special Limited Release Patch)
06.00.03.035
06.00.03.037
06.00.03.039
06.00.03.040
06.00.03.041
06.00.03.042
06.00.03.043
06.00.03.044

Patches Not In 06.05.00:
06.00.03.029 - Custom Engineering use only
06.00.03.036 - Custom Engineering use only
06.00.03.038 - This will be a 06.05.00 patch

Please refer to the "SPECTRUM 06.00.03 Download Library" for information on SPECTRUM 06.00.03 patches:

http://www.aprisma.com/support/secure/download/index.cgi?rev=06.00.03

Corrected and Known Anomalies

The following sections list the known irregularities or anomalies that have been corrected since the previous revision of SPECTRUM and current known anomalies.

Corrected and known anomalies are listed under the particular core, application, Management Module or toolkit component with which the anomaly is associated. Miscellaneous considerations and issues may also be included.

Alarm Notification Manager (SANM)

SPECTRUM Alarm Notification Manager (SANM) enhances the functionality of SANM-enabled, SPECTRUM-client applications that respond in various ways (e-mail notifications, trouble tickets, etc.) to alarms generated by SPECTRUM. SANM's Policy Administrator, an alarm filter configuration tool, enables you to specify and associate alarm notification policies with applications. A policy enables you to specify the types of alarms you want an alarm-processing application to receive and to filter out the alarms that you consider unimportant.

Considerations

You should be aware of the following consideration when using SANM:

1. When you define a new policy with the Policy Administrator, the policy is saved to the initial SpectroSERVER. If this SpectroSERVER goes down while you are defining a new policy, you cannot save the policy or create any further policies.

Scheduler Requirements for Windows NT

Because Windows NT uses the Task Scheduler (instead of the `cron` utility) to schedule tasks, Windows NT users should make sure the following requirements are met before using SANM's Scheduler:

- The Windows NT and Windows 2000 Task Scheduler must be running in order for the Scheduler to function. Set the Startup Type for the Task Scheduler to "Automatic" so that the Task Scheduler is started automatically whenever the computer is restarted.
- The Task Scheduler must also log on with the proper User Account. Be sure to specify that the Task Scheduler logs on as a member of either the Administrator's group or the Backup Operator's group. (Do not

specify the System Account — it cannot access the network.) Then make sure the user or user group assigned to the Task Scheduler is also defined as a SPECTRUM user in SpectroGRAPH.

If you find that the Task Scheduler is not performing SANM tasks as scheduled, check the Windows NT Task Scheduler Service Startup parameters. Even when these Task Scheduler parameters are incorrect, you can schedule associations. The Task Scheduler, however, will not be able to perform the association.

When Microsoft Internet Explorer 5.0 is installed on your PC, the Windows NT 4.0 Schedule Service (`Atsvc.exe`) is upgraded to the Task Scheduler Service (`mstask.exe`), which enables you to assign different user accounts to run scheduled tasks.

Corrected SANM Anomalies in SPECTRUM 6.5

1 If you change a SANM policy association while AlarmNotifier is running, and the value for GET_EXISTING_ALARMS in the .alarmrc resource file is set to TRUE, the states of all previously existing alarms are now correctly displayed as EXISTING.

Known SANM Anomalies in SPECTRUM 6.5

Problem 1: When you run SANM-enabled AlarmNotifier on the Solaris platform with the option `-ts` set less than the number of models you are filtering (e.g.: if you have 1000 models, you should not set the option `-ts` to be `500`), the swap space will eventually be used up causing SpectroSERVER to shutdown.

Solution: When setting up the trace file, be careful about its size in relation to the number of models specified in the policy filter. To be safe, accept the default size of `10000`.

Problem 2: If, in a distributed SpectroSERVER environment, policies are created and stored on different SpectroSERVERs by running Policy Administrator against different initial SpectroSERVERs and schedules are created to associate these policies with a particular application, the scheduled associations will fail.

Solution: Ensure that all policies are stored on one SpectroSERVER by always running Policy Administrator against the same initial SpectroSERVER.

Problem 3: On Windows NT, users selected to receive e-mail notification data may not receive e-mail. The user login ID is used by default to identify to whom notification data is sent.

Solution: Manually enter the complete e-mail addresses (not just the login IDs) of the users selected to receive e-mail into the Notification Data field in Policy Administrator. This will be corrected in a future release of SPECTRUM.

Problem 4: The Policy Administrator on Windows NT allows a maximum of 32,767 models to be displayed in the Add Filter Values view for Model Names.

Solution: In order to reduce the number of models within a list, filter models by model type or landscape and then by model name.

Enterprise Alarm Manager

Alarm Manager and Enterprise Alarm Manager provide the user with a dynamic view of SpectroSERVER alarms. If your network is modeled using a distributed SpectroSERVER, you may have several landscape icons in SpectroGRAPH, each representing its own SpectroSERVER. You can choose to view all or some of these landscapes in Enterprise Alarm Manager.

Corrected Alarm Manager Anomalies in SPECTRUM 6.5

1. You are no longer taken back to the main Enterprise Alarm Manager View (on the Solaris platform) after creating a pingable in a topology view, after you enter a model name in the Filter area, select the model name table, and then type in the model name entry.
2. On the Solaris platform, when you create a duplicate model, open the Alarm Manager from the duplicate model, open the popup view navigator menu off the alarm model, then select **Device -> Chassis**, you no longer receive an error message.
3. When you right click an alarm in the Alarm list while SpectroSERVER is shutdown, the model submenu and an error message no longer pops up telling you that SpectroSERVER is down or that troubleshooter actions will not be available. In addition, the Alarm Manager no longer freezes on Windows NT.
4. On the Windows platform, when you select Alarm Manager from the Tools menu while SpectroSERVER is in its startup process and you click **OK** from the Select Server dialog, you no longer receive an error message that contains bogus characters and can now restart Alarm Manager.
5. If you have modeled a landscape that has been modeled with an alarm on it, when you right click and choose either Topology,

Location, or Organization, you are no longer forced to open a new SpectroGRAPH.

6 On the Windows NT platform, the Auto Raise option now brings the Alarm Manager to the front when a new alarm is created.

Known Alarm Manager Anomalies in SPECTRUM 6.5

Problem 1: Newly created Alarm Descriptions in SpectroWATCH will not display in the Alarm Manager if the Alarm Manager was running at the time the watch and its custom Alarm Description was created. The alarm itself is displayed but without the custom new Alarm Description.

Solution: Exit then restart the Alarm Manager. The new view will be updated with your custom alarm description. This problem will be corrected in a future release of SPECTRUM.

Problem 2: When the Alarm Manager receives a Link Down alarm from a device modeled in the database, SPECTRUM asserts a Red alarm on the interface model that generated the trap, and a Yellow alarm on the device. If that same device receives a second Link Down trap from a different interface, that interface also turns Red. But when the device receives a Link Up trap from the second interface, SPECTRUM clears the red alarm on the second interface and the Yellow alarm on the device model. This results in a Red alarm on the first down interface model but no associated Yellow alarm on the device model.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 3: When printing an alarm report with multiple probable causes from the Alarm Manager using a Windows NT workstation, you may get the following printing problems:

1. The second listed probable cause (not shown in Alarm Manager without scrolling down) will bleed through the printout outside of the tab.

2. A selected alarm prints blackened out without being able to read it.

3. The probable cause column title bleeds through the scroll bar on the Windows NT printout.

Solution: These printouts require that you use a Level 2 Postscript printer which eliminates the printing problems.

Problem 4: Currently, alarm IDs may not be unique during a single runtime session of SpectroSERVER. One possible outcome could be when you attempt to clear one alarm, a different alarm is cleared instead.

Solution: The chance that this problem will occur is very low. This problem will be corrected in a future release of SPECTRUM.

Problem 5: When you filter by **Probable Cause ID**, everything is filtered out. When you toggle the filter to **Search** and you set the button to **Probable Cause ID**, no alarms are selected.

Solution: Paste the entire ID into the field instead of typing it one character at a time. This problem will be addressed in a future release of SPECTRUM.

Problem 6: In Alarm Manager, when a person's name (as opposed to a valid email address or username) is entered in the Troubleshooter/Name field, mail in Alarm Notifier will fail when it is sent to that person.

Solution: Enter either the person's email address or username as the Troubleshooter Name when entering Troubleshooter information. It can be the same as the email address entered in the email address field. This problem will be corrected in a future release of SPECTRUM.

Problem 7: The Enterprise Alarm Manager view resizes itself after you maximize the window, open the **View** menu, and select Show Toolbar. It will also resize itself after you open the **View** menu, and choose Show Filter/Search Panel.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 8: When you run Enterprise Alarm Manager (within a distributed environment) against a SpectroSERVER which does not have all model types linked in and which is modeling a landscape which contains some of these extra model types, the extra model types will not show up in the model type list of the filter dialog, but any alarms on the extra model types will be displayed in the alarm list.

Solution: Be sure the server has all model types (within a distributed environment) needed to display in the model type list.

Problem 9: When changing column sizes while the Model list is updating, the Enterprise Alarm Manager will crash.

Solution: Wait until the Model list completes updating and then resize columns. This has been found to be related to a third-party component vendor which has this case under review.

Problem 10: If the Model menu or the Icon Subviews menu (accessed by right clicking the device icon) is open at the time the device is removed from the view (for example, the alarm is cleared or the device is destroyed), accessing the menu causes the application to crash.

Solution: If the Model or Icon Subviews menu is open when the device is removed from the view, close the menu (release the right mouse button or click elsewhere in the view) and reopen the menu for the newly selected item. Aprisma is continuing to work with a third-party component vendor to investigate a fix or workaround for this problem.

Problem 11: When using the Enterprise Alarm Manager on systems running Windows NT, 4.0, and 2000, if you hit the `Return` or `Enter` keys while entering a text string in the Alarm Status field, the data reflected in the Alarm Status field in the AlarmNotifier will be truncated or include garbage characters. In addition, the values for fields following Alarm Status in the AlarmNotifier will also contain garbage characters. This is a problem if you are using AlarmNotifier in conjunction with Enterprise Alarm Manager.

Solution: Do not press the `Return` or `Enter` keys while entering text in the Alarm Status field since text will automatically wrap. This problem will be corrected in the next major release of SPECTRUM.

Problem 12: When you assign a troubleshooter to a remote SpectroSERVER and that server is later shut down and restarted, the assignment no longer exists.

Solution: This problem will be addressed in a future release of SPECTRUM.

Problem 13: On Windows NT, applications can appear to be frozen if you post a menu while an error dialog is displayed. For example, if you post the Icon Subviews menu and you get an error dialog stating that SpectroSERVER has lost its connection, the application will appear to be frozen.

Solution: To get out of this situation, merely press the Escape key.

Remedy AR System Gateway

The Remedy AR System Gateway provides you with many tools for managing network problems. The timely resolution of problems and service requests is one of the fundamental requirements of a network management system. The Remedy AR System Gateway provides the tools to efficiently detect, track, and resolve these network problems and service requests. The Remedy AR System Gateway ties SPECTRUM alarms into the Action Request System developed by the Remedy Corporation, thereby enabling network administrators to create a workflow process for support staff while automatically capturing a database of information for use in problem solving. Both end users and support staff can take advantage of the Remedy AR System Gateway.

Note:

In SPECTRUM 6.5, all new and current SPECTRUM customers must upgrade to the following:

AR System Server 4.5.2, or 4.5.1 and HelpDesk 4.0.2.
AR Administrator Utility 3.51 (Solaris), 4.5 (Windows).
AR Client Utility 4.5.

Considerations

You should be aware of the following considerations when installing or using the Remedy AR System Gateway:

Tasks Required When Migrating to SPECTRUM Version 6.5.0 of the AR System Gateway

If the AR System Gateway is already installed, there are several considerations that must be made prior to setting up the SPECTRUM version 6.5.0 AR System Gateway. The SPECTRUM Trouble Ticket form provided with SPECTRUM 6.5.0 has changed. If you want to retain the current version of the SPECTRUM Trouble Ticket form rather than use the new form, there are several tasks that must be performed to update

the functionality of the form. (Refer to the **Setting Up AR System Gateway** section in the ***AR System Gateway User's Guide***.)

Remedy does not allow multiple trouble ticket forms with the same name. Therefore, when the new SPECTRUM Trouble Ticket form is imported, existing trouble tickets will no longer be associated with the prior form. Prior to importing the new SPECTRUM Trouble Ticket form and its associated filters and links, you need to export all existing SPECTRUM trouble tickets contained in the Remedy AR System database. This is necessary to ensure that the new SPECTRUM Trouble Ticket form which will be imported can access the existing trouble ticket information in the database. Once the AR System Gateway is set up, this trouble ticket information will be re-imported. See **Migration Tasks-General Directions** in the ***AR System Gateway User's Guide*** for detailed instructions.

All Platforms

- Both the file system where you install the AR System Gateway and its file creation mask should be set up with **read/write (rw) access** for all users of the AR System Gateway.
- If you perform an installation of SPECTRUM, the AR System Gateway defaults to the following directory: `//usr/ar` on Solaris, and `c:\Program Files\Remedy` on Windows NT. If your network configuration differs from these defaults, make sure you use the `reconfig` tool to perform the steps described in the ***AR System Gateway User Guide***.
- Beginning with SPECTRUM 6.0.0, the Gateway will be started by `processd`. In order for a successful start, SpectroSERVER needs to be already running. For a further discussion on starting the Gateway, please refer to the ***AR System Gateway User Guide*** task on Stopping Automatic Trouble Ticket Generation.

Network Configuration Requirements

If you are using the base level AR System Gateway (the AR System Gateway without SPECTRUM Alarm Notification Manager (SANM)) to generate automatic trouble tickets in a distributed SpectroSERVER environment, you need to set up the network configuration following this general rule:

- The system where you install the AR System Gateway must have both SpectroGRAPH and the AR System Client tools on it.

If you are using the advanced level AR System Gateway (with SANM), you do not need to perform the above configuration step. One AR System Gateway can then connect to multiple SpectroSERVERs.

Note:

If you are not interested in automatic trouble ticket generation and you want to use the AR System Gateway just to submit trouble tickets manually, you need to install only one AR System Gateway for one SpectroSERVER. When you use the SpectroGRAPH that is on the node with AR System Gateway, you can still submit trouble tickets for alarms from any landscape modeled on that node's SpectroGRAPH. Just select a landscape icon, open the Alarm Manager view window, and submit a trouble ticket for any of the alarms visible in the Alarm Manager.

Corrected ARS Gateway Anomalies in SPECTRUM 6.5

1. When you launch AR System Gateway on Windows NT, you no longer get a bash shell with continuously scrolling error messages nor a crash of the Policy Administrator.
2. When performing a Manual Submit via the SPECTRUM Alarm Manager, the submit no longer fails when the probable cause text string is too long. When the **Show Similar Tickets** button is pressed on Windows NT from the SPECTRUM Trouble Ticket, the resolution field is now exploded.

Known ARS Gateway Anomalies in SPECTRUM 6.5

Problem 1: When you run SANM-enabled AR System Gateway on the Solaris platform with the `-ts` option set less than the number of models you are filtering (e.g.: if you have 1000 models, you should not set the option `-ts` to be 500), the swap space will eventually be used up causing a SpectroSERVER shutdown.

Solution: When setting up the trace file, be careful about its size in relation to the number of models specified in the policy filter. To be safe, accept the default size of 10000.

Problem 2: When the Automatic Trouble Ticket Generator is invoked by `processd`, you have no access to setting SANM parameters.

Solution: Modify the `ARSGD.idb` file located in the `<$SPECROOT>/lib/SDPM/partslist` directory. This problem will be corrected in a future release of SPECTRUM.

Problem 3: Base-level (no SANM) only (Windows NT)— If you modify your filters when the Automatic Trouble Ticket Generator (arsgated) is running, the modifications are not known by the arsgated.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 4: When running the `arsgated`, if the Remedy AR System Server password is not entered on the command line *or* is not present in the resource file, you are not prompted for your password.

Solution: The Remedy AR System Server password must be either entered on the command line *or* present in the resource file. This will be corrected in a future release of SPECTRUM AR System Gateway.

Problem 5: If an alarm is generated on a model with no name and a trouble ticket is submitted from the Alarm Manager, when you list all the tickets in Remedy the trouble ticket for that particular model is available but will not be visible. This is because when displaying all trouble tickets, Remedy lists the impacted object (model name) as the name in the list.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 6: On the Windows NT and 2000 platforms, if you submit a trouble ticket on an alarm to Remedy, no trouble ticket is submitted. In addition, no error message of any kind is generated. This is occurring because the Remedy libraries are not found by the Alarm Manager.

Solution: Manually add the location of the Remedy directory to the environment variable PATH in the System Control Panel. For example, if the location is "D:\Program Files\Remedy", add this to the value for PATH in the System Control Panel, log out, then log back in again. When you run Alarm Manager, it should find the Remedy libraries in the specified location and you will be able to submit trouble tickets. This problem will be corrected in the next release of SPECTRUM.

Problem 7: When the `reconfig` tool script is run by any user other than the SPECTRUM installer (with full root and ADMIN,0 privileges), the ARSGD.idb file necessary for processd to start and maintain the Gateway process will not be successfully placed where it needs to be. The user receives the message:

cannot create /usr/SPEC_6.5.0/lib/SDPM/partslist/ARSGD.idb: Permission denied
reconfig: .save: cannot create reconfig: .save: cannot create reconfig: .save: cannot create
reconfig: .save: cannot create

Reconfiguration completed successfully.

The last line is misleading.

Solution: Aprisma will be providing a more instructive error message that lets you know that you need to be root or an administrator with full read/write privileges to run the `reconfig` script successfully. This message will be available in a future release of SPECTRUM. In the meantime, if you want the Gateway to be started and maintained by `processd`, the root/admin user needs to copy the file from the `$SPECROOT/ars_gateway` directory to the `$SPECROOT/lib/SDPM/partslist` directory after having run the `reconfig` tool.

Annotation Toolbox

The Annotation Toolbox, allows you to edit SPECTRUM views by adding lines, circles, boxes, and text. The toolbox provides several graphic tools to enhance a view's background by adding extra graphics or text.

Known Toolbox Anomalies in SPECTRUM 6.5

Problem 1: The following fonts may not work correctly:

- The **Application** font (at any size) changes to Symbol when not bolded or italicized.
- A wrong font displays when you change the **Fixed** font to a different font (not bolded) at sizes 0, 16, and 24. If bolded, the font works correctly.
- When you choose the **Mincho** font, it displays with foreign lettering regardless of size, slant, and height.
- When you enlarge the **Open Look Glyph** font, the letters become too large and get cut off.

Solution: The above font behaviors are not SPECTRUM font errors but are based on the font architecture themselves.

Problem 2: When you select the **Mincho** (Medium) font and select both the Keep Tool and Font Tool, nothing appears when you type in the SPECTRUM edit screen. When you click and drag a box around the typed area, highlighted spaces appear which can be erased. If you click and drag a box around the area again, nothing is highlighted. Everything you previously typed has been erased.

Solution: The existing Annotation Toolbox will be replaced with a new and improved version in a future release of SPECTRUM.

AutoDiscovery

AutoDiscovery is SPECTRUM's automatic topology mapping facility. AutoDiscovery offers three Discovery Methods:

• **IP List** maps a discovered device's IP address to a physical (MAC) address.When this method is used, AutoDiscovery will attempt to contact and identify only those devices at the IP addresses you specify when you create the configuration.

• **Range** uses the Internet Control Message Protocol (ICMP) echo requests (pings) to test each of the IP addresses within the range or ranges you specify in the IP Address Ranges panel. When this method is used, AutoDiscovery will attempt to contact and identify devices at each IP address within the range(s) bounded by the pair(s) of low and high addresses you specify.

• **Router** examines the route tables in your network's routers to establish the high-level topology of your network, creating subnets and Local Area Networks (LANs). Router discovery configurations require both a range of IP addresses (to establish the boundaries of the discovery) and one or more IP addresses for routers that AutoDiscovery will use as "seed" routers. The route information table and/or the routing neighbor tables of each seed router will then be queried to determine the addresses of neighboring routers. If these addresses are within the specified range, they too are queried, and the process is repeated until all known neighbors within the range(s) have been queried.

Corrected AutoDiscovery Anomalies in SPECTRUM 6.5

1 You no longer receive an error message when you model a router with large route tables which is not responding to SNMP.

Known AutoDiscovery Anomalies in SPECTRUM 6.5

Problem 1: AutoDiscovery may fail to discover a Token Ring the first time AutoDiscovery is run. It may find one ring while failing to find another ring.

Solution: Run Ring Discovery, and the missing ring will be found.

Problem 2: On Windows NT, if you run AutoDiscovery and then search for an IP ATT1000 model, it is found as a pingable. If you destroy the device and model it by IP, it is discovered as an ATT_SmartHub.

Solution: This device does not support the necessary MIBs that allow AutoDiscovery to classify it as an SNMP agent. Aprisma may address this problem in a future release of SPECTRUM.

Problem 3: When working in JAVA-based applications such as AutoDiscovery and MibTools, you are able to cut/copy and paste multiple lines from an Xterm window into JAVA-based text fields that only accepts one value such as the "IP Address List", or the "Community String." When you do this, you get unwanted results such as lists of text lines or IP addresses you pasted in, and possibly other strange results. You also receive the following error message:

```
Attempt to enter an IP Address that does not conform to
standards, please correct the IP Address entered.
```

This problem also occurs when using the copy/cut and paste hotkeys.

Solution: Avoid pasting multiple lines of text in fields. This problem will be fixed in a future release of SPECTRUM.

Problem 4: When performing a router discovery, switches which are connected to Cisco routers are discovered in addition to the Cisco routers. This occurs because the Cisco Discovery Protocol includes switches (such as the Catalyst 5000 and 5005) in its tables and because the **Use CDP Table** checkbox setting cannot be deselected.

Solution: As a workaround, if you do not want these devices included for exporting or for modeling purposes, you can remove them from the result set through the **Filter** button. The **Use CDP Table** checkbox setting will be made user-selectable in a future release of SPECTRUM.

Problem 5: When running AutoDiscovery on a shared Solaris workstation, if you inadvertently run more than one AutoDiscovery you receive a warning message that says:

```
Running multiple copies of Autodiscover, can corrupt the
database. If there are no other autodiscoveries running
select Continue otherwise select Exit.
```

If you select **Continue** you will damage the database because it is difficult to determine if another AutoDiscovery is running. When you check to see which processes are running, the AutoDiscovery processes are labeled similar to:

```
Java/1.3/bin../bin/sparc/native_threads/j
```

Solution: Select **Exit** and check to see if there are processes running that are labeled:

```
Java/1.3/bin../bin/sparc/native_threads/j
```

If you have at least one, then AutoDiscovery is currently running and do not run a second AutoDiscovery. Aprisma is examining a more descriptive warning message and process name for a future release of SPECTRUM.

Problem 6: When AutoDiscovery is remotely launched to a Windows NT or 2000 workstation from a Solaris workstation, the File menu options display in the center of the screen instead of under the File menu selection.

Solution: This problem will be corrected in a future release of SPECTRUM.

Command Line Interface

The Command Line Interface (CLI) provides access to SpectroSERVER in situations where it is not possible or not desirable to use SpectroGRAPH's graphical user interface. One such situation is the use of a character-based terminal to remotely access SpectroSERVER.

Known CLI Anomalies in SPECTRUM 6.5

Problem 1: When using the "`-a`" switch (create event alarm), it can sometimes take longer for the event to appear in the event list. The command exits successfully (`0`) but displays no output. If the user attempts a subsequent `show events` command on the model handle (if no model handle was given, is set as current, or a landscape handle was used, and then execute the `show events` command on the user's model handle), the event will show up.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 2: In SPECTRUM 6.0.3 it is possible to perform an installation of the Command Line Interface tools on a SpectroSERVER-only workstation. However, the "`-x`" switch to `show alarms` and `show events` does not provide the normal alarm Cause or Event format information because the `SG-Support/CsPCause` and `SG-Support/CsEvFormat` files do not exist in the `<$SPECROOT>` directory. Possible errors messages are:

`no cause information available` (associated with `show alarms`)

`no event format information available` (associated with `show events`)

Solution: This missing functionality may be restored by copying the `SG-Support/CsPCause` and `SG-Support/CsEvFormat` directories and files to `$SPECROOT/SG-Support` on the SpectroSERVER workstation. This problem will be corrected in future release of SPECTRUM.

Problem 3: When executing a `show attributes` command on a specific model with many list attributes, the values and id's of the list attributes do not coincide with the values returned from the `show attributes` command when the list attribute is specified.

Solution: This problem will be corrected in a future release of SPECTRUM.

Control Panel

The SPECTRUM Control Panel is a convenient “point and click” interface that provides facilities that let you configure SPECTRUM resources, start and stop SpectroSERVER, start SpectroGRAPH, perform database administration and maintain your SPECTRUM installation.

Known Control Panel Anomalies in SPECTRUM 6.5

Problem 1: When `processd` is shutdown, the Control Panel dialog boxes have no title causing you not to know where these errors originated from or what the errors are unless you click them.

Solution: This problem will be corrected in the next release of SPECTRUM.

Problem 2: When you telnet to a Solaris workstation from a Windows workstation with Exceed installed, navigate to the `<$SPECROOT>/bin` directory and try to launch the Control Panel, you receive messages similar to the following :

```
WARNING premature end of X11 from name in -sni-pct-medium-
ot-normal--13-130-75-c-60-ibm437

WARNING premature end of X11 from name in -sni-pct-medium-
ot-normal--16-160-75-c-80-ibm437

WARNING premature end of X11 from name in -sni-pct-medium-
ot-normal--24-75-75-c-120-ibm437
```

This is a font name problem with Exceed and not with SPECTRUM.

Solution: You may safely ignore these messages. The Control Panel will start normally.

Problem 3: On both the Solaris and Windows NT platforms, there are several problems when using Host Security which are:

1. If you try to add a server name that is not a legitimate server name, the Host Security window appears to have added the name but in fact does not.
2. If you do not have write privileges, the Host Security window appears to have added or deleted the name but in fact did not.
3. If you try to delete a server name from the Server List that is not a legitimate server name, the Control Panel crashes.

Solution: The host name must be a legitimate name in order to safely **Add** or **Delete**. You must have write privileges to the `.hostrc` file in order to **Add** or **Delete**. Descriptive warning messages will be included in a future release of SPECTRUM.

Data Export

Data Export extracts archived events and statistics data from SPECTRUM DDM (Distributed Data Manager) databases and current data for object entities stored in SpectroSERVER databases. Data Export converts extracted data to the output format that you specify — either ASCII, SAS, Oracle, or SQL. Data Export connects to a single SpectroSERVER in a distributed server environment and can extract data from any of the landscapes registered with that SpectroSERVER. The data can then be imported into a report generator, database, spreadsheet, or statistics-analysis application of your choice.

Note:

Consider the following when you use SPECTRUM Data Export:

1. On the Solaris platform, if scheduled exports are not occurring at their specified time it may be necessary to stop and restart your cron daemon. Contact your system administrator for more details regarding cron on your workstation.
2. Oracle exports will not import all of the data to the Oracle database if the table space is inadequate. Make sure that the Oracle database contains enough table space to import all Oracle data.
3. The SPECTRUM 6.0 version of Data Export is supported by a SPECTRUM 5.0 Rev 1 SpectroSERVER. However, Statistics and Events exports with ranges of Week and Month will only get the first day's data.

Corrected Data Export Anomalies in SPECTRUM 6.5

1. Statistical exports no longer fail in SQL databases because of an incorrect echo statement in the scripts.

Known Data Export Anomalies in SPECTRUM 6.5

Problem 1: An error may occur if several models are selected from multiple landscapes and re-selecting the Events filter box. You receive the error message, "`Unable to obtain any models from all preferred landscapes`."

Solution: Aprisma is aware of this problem and is assessing it.

Problem 2: When you perform an export using a UNIX based Oracle server and Windows NT as the client the export completes but you are unable to view the table even though the table exists in the database. Since the Oracle server is on UNIX and the client is on Windows NT, this becomes a heterogeneous environment when a homogenous environment is needed. You receive an error message that says:
"`Error checking path homogeneity`
`ORA-02352: Direct path connection must be homogeneous`"

Solution: Oracle exports in a heterogeneous environment (i.e., across Windows NT and UNIX platforms) are not supported. Both the Oracle client and Server must be the same platform (i.e., NT to NT or UNIX to UNIX). (*An NT client export to a UNIX server will work in Oracle 8 but not in Oracle 7.*) If the client and server are not of the same platform, you must use a conventional path load... "Use conventional path load." This is discussed in Chapter 9, "Direct Path Loads" of the ***Oracle 7 Server Utility User's Guide***.

Problem 3: Exports to Sybase on the Windows NT platform fail because the 10.0 /10.0.3 versions of Sybase Open Client do not correctly handle the syntax, "**! !**", on Windows NT.

Solution: Aprisma recommends that you upgrade to Sybase Open Client, Release 11.

Problem 4: When trying to export to SAS, it fails with error messages. A syntax error in the SAS `autoexec.sas`, and `config.sas` files, can cause these messages. Examples of the messages are:

```
Mar 21 16:02:19 Description: Export Definition Description
SpectroSERVERS: svaa0026 0x2f80000
Mar 21 16:02:19 Begin Models export to model
```

Solution: Do not change the `autoexec.sas` file for data export as inconsistent results may occur.

Problem 5: When SDE exports Models to an existing table, the existing table is truncated rather than dropped, leaving intact the table column characteristics. If you have increased the default model name length (via the `SDE_OUTPUT_MODEL_LEN` variable in the `dtxscript`) and the ensuing export contains models with names longer than the previous default, the export will likely fail with an Oracle error indicating that the insert value was too large for the column.

Solution: Manually drop the existing table and then perform the export. This will establish the column width to the value specified in the `dtxscript`.

Event Configuration Editor

The Event Configuration Editor allows creation, deletion, modification, and browsing of the following information in SPECTRUM: Alert Map, Event Disposition, Event Format, and Alarm Probable Cause files.

Known Event Configuration Editor Anomalies in SPECTRUM 6.5

Problem 1: When you edit EventDisp to allow an alarm or log an event on just one model type, the change you made for one vendor becomes true for many vendors. This causes all model types to respond to in the same way to a specific trap. Redefining an event contained in the EventDisp file in a vendor-specific directory is ignored since the event is also in the Aprisma EventDisp file. SPECTRUM does not allow overriding a definition in the EventDisp file once an event is defined in the table.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 2: When you make Frequency or Persistent Event extensions to the EventDisp files using a text editor (such as vi, or emacs), and you later modify those same Events through the Event Configuration Editor, it could overwrite or drop any Frequency or Persistence changes.

Solution: Use a text editor such as vi or emacs to make these modifications and do not use them in the Event Configuration Editor.

Enterprise Configuration Manager

Enterprise Configuration Manager is an application that enables customers to monitor, document, troubleshoot, and control the configuration of network devices.

Special Scheduler Requirements for Windows NT Users

Because Windows NT uses the Schedule Service (instead of the `cron` utility) to schedule tasks, Windows NT users should make sure these additional requirements are met before using Enterprise Configuration Manager's Scheduler:

- The Windows NT Schedule Service must be running in order for the Scheduler to function. Set the Startup Type for the Schedule Service to "Automatic" so that the Schedule Service is started automatically whenever the computer is restarted.
- The Schedule Service must also log on with the proper User Account. Be sure to specify that the Schedule Service logs on as a member of either the Administrator's group or the Backup Operator's group. (Do not specify the System Account—it cannot access the network.) Then make sure the user or user group assigned to the Schedule Service is also defined as a SPECTRUM user in SpectroGRAPH.

If you find that the Scheduler is not performing Enterprise Configuration Manager tasks as scheduled, check the Windows NT Schedule Service Startup parameters. Even when these Schedule Service parameters are incorrect, you can schedule Enterprise Configuration Manager operations — captures, loads, and verifications. The Scheduler, however, will not be able to perform these operations.

When Microsoft Internet Explorer 5.0 is installed on your PC, the Windows NT 4.0 Schedule Service (`Atsvc.exe`) is upgraded to the Task Scheduler Service (`mstask.exe`), which enables you to assign different user accounts to run scheduled tasks.

Cisco Router Requirements

If you are planning to work with Cisco routers in a Windows NT environment, you must perform additional steps after you install Enterprise Configuration Manager. Cisco routers use the Trivial File Transfer Protocol (TFTP) to transfer configuration files. Therefore, you have to make sure your workstation is set up as a TFTP server.

To set up your Windows NT machine to support TFTP after you install the Enterprise Configuration Manager, do the following:

1. At the command prompt, navigate to the `system32` directory under the system root directory (which is likely to be the `C:\Winnt` directory):

   ```
   cd C:\Winnt\system32
   ```

2. Copy the `*.dll` files from the `C:\Win32App\Spectrum\tftpboot` directory into this directory:

   ```
   copy C:\Win32App\Spectrum\tftpboot\*.dll .
   ```

3. In MS Windows NT you can start up the `tftpserver` (located in the `C:\Win32App\Spectrum\tftpboot` directory) in either of two ways:

   - Double-click on the file name in File Manager or Windows NT Explorer.
   - Start up the server using the Startup file folder in Windows. For details on doing this, refer to your Windows NT user documentation.

Considerations

You should be aware of the following considerations when using Enterprise Configuration Manager:

- Enterprise Configuration Manager cannot successfully *capture* a device's attributes unless the community string matches the community string in the SNMP-managed device itself. Likewise, Enterprise Configuration Manager cannot successfully *load* external attributes to a device unless the community string matches the community string that has write permission in the SNMP-managed device itself. If you need to change the device's community string, you can do so by loading a new configuration with the correct `Community_Name` attribute value to the device.
- Enterprise Configuration Manager can also capture host configurations if the community string matches the community string that has write permission in the SNMP-managed device itself.
- Enterprise Configuration Manager may not successfully capture attributes that require instance IDs if you are working with early Management Modules (in particular, those that support Cabletron proprietary protocol devices such as the IRM). If you need to capture a configuration from one of these devices, create a configuration manually (without a template) containing only attributes that *do not* require instance IDs. Then manually insert the attributes with the known instance IDs and the attribute values in the configuration.
- If you are working in a distributed SpectroSERVER environment, make sure you manually add your user account to each landscape on which you intend to perform Enterprise Configuration Manager functions. Enterprise Configuration Manager will not be able to contact a landscape if the landscape lacks the proper user accounts.
- If configurations are created for an extremely large number of models, the scrollable box located in the Overview list, to the left of the Configuration list, will disappear from view if dragged downward, and the Overview list will not appear scrollable.

- Host Configuration operations will only work for Cisco Catalyst devices after navigating to the CatStack application.
- Background operations for Cisco Catalyst devices will only work if the model handle used is that of the CatStack application, not of the device itself.

Running Enterprise Configuration Manager from the Command Line (Solaris)

- Before you can run Enterprise Configuration Manager manually from the command line, you must define the XUSERFILESEARCHPATH variable.
- Use the appropriate command for your shell to set the XUSERFILESEARCHPATH variable to the value:

  <SPECTRUM directory>/app-defaults/%N

- If the XUSERFILESEARCHPATH variable is already set, then append **<SPECTRUM directory>/app-defaults/%N** to the end of the value, inserting a colon (:) separator between the values.

Corrected Enterprise Configuration Manager Anomalies in SPECTRUM 6.5

1 The online ***Enterprise Configuration Manager User's Guide*** now displays when you select **Help->User's Guide** from the Enterprise Configuration Manager menu bar. The X window manager no longer performs unpredictably when you select attributes from devices that display duplicate attributes.

Known Enterprise Configuration Manager Anomalies in SPECTRUM 6.5

Problem 1: The Enterprise Configuration Manager cannot use External List-typed Attributes that have OID References within configurations. If you create or capture a configuration in Enterprise Configuration Manager you receive the error message, “No instance exists.” for any External List-type Attributes that have an OID Reference.

Solution: Use the Model Type Editor to create an identical Attribute to the one you need to use in configurations, but do not make it List-type. Then use that new Attribute in configurations to access and set the value on the device. This problem will be corrected in a future release of SPECTRUM.

Problem 2: The Detail Result windows of Load, Capture, or Verify, do not show friendly strings for `enum` attributes. This is the same for the `ecmbg` log.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 3: When you install SPECTRUM 6.0.0 on a Windows NT workstation that previously had SPECTRUM 5.0 installed, Enterprise Configuration Manager will show no data for a load or capture if you fail to use the appropriate tftpserv executable, even though the tftp server popup window says, “completed transfer” and the view states, “Success.”

Solution: When you install SPECTRUM 6.0.0 on an Windows NT workstation where a previous SPECTRUM 5.0 existed, you must use the following `tftpserv` executable for a successful capture or load in Enterprise Configuration Manager:

```
<$SPECROOT>/tftpboot/tftpserv.exe
```

Problem 4: When displaying long attribute values, the Verify Detail window sometimes truncates the left portion of the display. This may happen when you scroll to the right in the Verify Detail window, cancel out of the window, and then re-enter the Verify Detail window.

Solution: Once the truncation has occurred, click in the middle of the horizontal scroll bar. Enterprise Configuration Manager resets the display so that it is left justified.

Problem 5: Some attributes such as `AT_Net_Addr` are no longer maintained by the designers of the device. In the MIB, these variables have the status of "Deprecated." Attempts to read or write to these attributes will meet with unpredictable results.

Solution: If you have problems reading or writing to certain attributes, use the SPECTRUM MIB tools to see if the status is specified as "`Deprecated`." If so, omit the attribute from the configuration or template.

Problem 6: Background Host Configuration operations fail for HubCat1900 series devices.

Solution: The HubCat1900 does not support the CAT-STACK-MIB.

Known Scheduler Anomalies on the Solaris Platform

Problem 1: When you use the **Once** frequency to schedule an operation, the Scheduler performs the task and then may update the entry in the Scheduled Entries field so that the task is scheduled for next year at the same time.

Solution: If you see entries for a future year that you did not schedule, just delete them.

Problem 2: Sometimes operations scheduled in the Enterprise Configuration Manager Scheduler may not occur at their specified times.

Solution: Stop and restart your **`cron`** daemon. Contact your system administrator for more details about **`cron`** and your workstation.

Network Configuration Utilities

Network Configuration Utilities are a set of applications, accessible from SPECTRUM Search Manager, that enables you to perform the following device management tasks for Cabletron devices that are modeled in SPECTRUM:

• Configure and execute TFTP firmware image downloads using the Firmware Download Tool.

• Modify community strings using the Modify Community Strings Tool.

Known Network Configuration Utilities Anomalies in SPECTRUM 6.5

Problem 1: The Modify Community Strings Tool does not allow you to modify community strings on devices with which SPECTRUM has no contact.

Solution: Make certain that the SPECTRUM model community name matches any one of the valid community names on the device. Telnet to the device and change the community strings via local management. You can also change the SPECTRUM community string in the information GIB using the GIB Editor. See the ***GIB Editor User's Guide*** for more information. This will be corrected in a future release of SPECTRUM.

Problem 2: Offline downloads (*.hex files) are not supported by the Network Configuration Utility. However, some devices and firmware revisions support only offline downloads. If you attempt an online download to a device that supports only offline downloads, it may cause the device to go into BOOTP mode.

Solution: Do not attempt a Network Configuration Utility firmware download to devices which do not support online downloads.

Problem 3: When changing the SPECTRUM community string on certain SmartSwitch 9000 blades (such as the 9E133-36 and 9E132-15) with the Modify Community Strings tool, **SUCCESS** is reported in both the Operation Status tab panel and the device list's Status column. However, the change is not made, which can be verified as follows:

1 Right-click the **device model** in SpectroGRAPH.

2 Select **Model Information.**

Notice that the **Security String** still has the original value.

Solution: To change the SPECTRUM community string for these devices:

1 Right-click the **device model** in SpectroGRAPH

2 Select **Model Information**.

3 Change the **Security String** to the proper value.

This problem will be corrected in a future release of SPECTRUM.

Problem 4: When you attempt to Download Firmware with an incorrect TFTP server address the action will fail, but with some devices you will receive an ambiguous error message which states, `TFTP Error: File Not Found`. The message should read: `No response from specified server`.

The ambiguous message will occur on some device firmware downloads. Still in other firmware downloads, the message will be correct.

Solution: This error originates with the device, not Firmware Download. If you receive this error, verify that the TFTP server is valid and available, in addition to verifying the file information.

SPECTRUM Installation Program

Information on installing SPECTRUM on Solaris, Windows NT and 2000, system requirements, RAM, and hard disk requirements plus any other information needed for a successful install of SPECTRUM may be found in the ***Installation Guide***.

Known Installation Anomalies in SPECTRUM 6.5

Problem 1: During an installation on a Windows NT workstation, you may receive the message, "`! The Security log file is full.`"

Solution: You may safely ignore this message. It can be avoided by increasing the size of the Windows NT Security Log, purging the Windows NT Security Log or instructing the Security Log to overwrite older events as needed. These changes can be made in Start|Programs|Administrative Tools| (Common)|Event Viewer|Log|Log Settings. You may also want to disable security auditing since it affects performance. Security auditing can be turned off in Windows NT Explorer by right-clicking the directory which is being audited and selecting Properties|Security|Auditing.

Problem 2: After installing SPECTRUM on a Windows 2000 workstation, a user who is a member of the Administrator User Group is removed from this group and made part of the SPECTRUM User Group. This occurs only if you used the WIN2000 User Manager to view your Group permissions and then click **OK.** This is an unexpected behavior in Windows 2000 and has been brought to the attention of Microsoft (case #SRX000428601204).

Solution: Login as an Administrator and re-add the user(s) to the Administrators User Group.

Problem 3: When you run host_eval on Windows NT with a foreign operating system, you receive a message warning that you have a missing operating system patch and to contact your system administrator to correct the problem. This warning appears when host_eval fails to detect either Service Pack 5 or 6.

Solution: Service Packs 5 or 6a are required to run SPECTRUM.

Problem 4: On the Solaris platform, SPECTRUM cannot be installed in the `/opt/SPECTRUM` directory.

Solution: This problem will be addressed in a future release of SPECTRUM.

Problem 5: On the Windows NT platform, you are not allowed to perform an installation into a directory that contains a space.

Solution: This problem will be addressed in a future release of SPECTRUM.

Problem 6: On Solaris 2.7 platform, when you upgrade in place from SPECTRUM 5.0rev1with CS4 MMS4 to SPECTRUM 6.0, the installation fails because the SpectroSERVER and Archive Manager were never run prior to the migration. You receive the error message,
`** Error during Creation of DDM database save file`
The ddm_save program fails to save a database which never had data archived to it. Users normally do not migrate empty databases.

Solution: (1) If migration of the current DDM landscape handle is not possible, instead of initializing the DDM database prior to the migration installation, simply delete the whole `DDM` directory. To delete the `DDM` directory, navigate to the install directory and type:
`rm -rf SS/DDM`
The SPECTRUM 6.0 installation will initialize the DDM database without attempting to perform a `ddm_save`.
-or-
(2) Run the previous release of SPECTRUM long enough to populate the DDM database with some events or statistics, then shutdown and perform the migration installation. Aprisma is investigating the root causes of this problem.

Problem 7: On the Solaris 2.7 platform, when you upgrade in place from SPECTRUM 5.0rev1with CS4 MMS4 to SPECTRUM 6.0 and the DDM database fails to install, when you move the DDM directory to `DDM_old`, click the **Cancel** button and continue the installation, the installation will segmentation fault.

Solution: Aprisma is investigating the root causes of this problem.

Problem 8: On both the Windows NT and 2000 platforms, when you migrate from SPECTRUM 6.0.x directly to 6.5.0, or perform an installation of SPECTRUM 6.5.0 on a machine with no SPECTRUM files, you may receive messages that the installation has failed such as:

```
Error during Link of SpectroGRAPH.exe
Installation Failed to link SpectroSERVER.exe
```

and so forth. Under this scenario the executable files are built, but no errors are posted anywhere.

Solution: Even though the messages indicate the executable failed to build, you may safely ignore these messages. Aprisma is examining this problem which will be addressed in a future release of SPECTRUM.

Problem 9: When you install SPECTRUM on either a Windows NT or 2000 workstation with a username containing a space (for example, “NT SPECTRUM”) the installation appears to have run successfully except at the very end when you receive the following message similar to:

```
sed: Unterminated ‘s’ command
```

You could possibly receive this message several times.

Solution: Avoid spaces in SPECTRUM usernames.

JMibTools

JMibTools is a tool that lets you access and manage any SNMP-compliant — device through its Management Information Bases (MIBs). A MIB is a database maintained by the device that stores all its known management information. Each individual element of information in the MIB is termed an Object.

Known JMIBTools Anomalies in SPECTRUM 6.5

Problem 1: When you try to run more than one session of MIBTools on the same workstation, you may receive a blank warning message. You are prevented from running more than one session of MIBTools on the same workstation.

Solution: A solution is being considered for a future release of SPECTRUM.

Search Manager

The Search Manager application allows you to search for specific models in the SPECTRUM database. You can either search for models using predefined criteria or create your own customized searches. Search Manager also provides access to attributes in the SPECTRUM database, allowing you to change attribute settings on individual models or globally for all models of a type.

Known Search Manager Anomalies in SPECTRUM 6.5

Problem 1: After saving and adding searches to the Predefined list and then choosing Erase User Preferences (or Group Preferences as well) under the Options menu, all of the saved searches are cleared and lost when you launch Search Manager again.

Solution: Avoid using the Erase User Preferences (or Group Preferences) option. This problem will be addressed in a future release of SPECTRUM.

Problem 2: On the Solaris platform, the Search Editor does not pop to the foreground when opened through a Search Manager Main window selection and remains open and hidden behind other open windows.

Solution: This is a behavioral problem with the Solaris Common Desktop Environment (CDE) and can be corrected by deselecting the “Raise window when made active” option in the Style Manager-Window popup dialog.

SpectroRX

SpectroRx uses a problem-solving technique called case-based reasoning to organize the knowledge about network problems. A case consists of the alarm resolution information that you enter and additional alarm information provided by SPECTRUM. As you enter information about new alarms, SpectroRx adds the case to its case library. When you request information about solutions for a current alarm, SpectroRx finds the cases that are similar to that alarm and sorts them according to their degree of similarity to the alarm situation. The most similar case is displayed first, the least similar last. You review these past cases and adapt the solutions to the current problem.

SpectroRX Conversion Instructions

In SPECTRUM 6.*x*, the location of SpectroRx has changed from `${SPECROOT}/CBR` to `${SPECROOT}/SG-Tools/CBR`. With this change, the location of the database files has also changed. These files (`cbr.db`, `cbr.map`, `prob_list`, and `sol_list`) now default to `${SPECROOT}/SG-Tools/CBR/SpecRx`. To change this default, please refer to the section in your manual that discusses “Customizing the Environment.”

In addition, the structure of the database has changed, both to allow more freedom in documenting problems (in the Probable Cause files) and for greater efficiency in accessing the database.

In order to use your existing database(s) with the new SpectroRx, some changes to the database files will be needed. The first step in this process is to move the files from their current location (the previous default was `${SPECROOT}/CBR`) to the new location (as mentioned above). The following files need to be moved (this list is comprehensive; if you are missing any file other than the first four, there is no need for concern): `cbr.db, cbr.map, prob_list, sol_list, cbr_back.db, cbr_back.map, prob_list.bak, sol_list.bak`

Once these files have been copied to the new location, each must be modified (make a backup copy first). The changes are as follows (please

note that the **quotation** marks are provided simply to delimit the strings, and should not be considered part of the change):

File To be Modified

`cbr.db, cbr_back.db.`

If the first line of this file starts with the word “begin” - delete the line.

If the second line of this file starts with the string “`cnum=0|`”, change it to read “`cnum=0\205`” (note that the “`\205`” is the hex code for the à character).

For each succeeding line, change the following:

“`|pk=`” => “`\205pk=`” (again, `\205` is the à character)
“`|pt=`” => “`\205pt=`”
“`|rd=`” => “`\205rd=`”
“`|sol=`” => “`\205sol=`”
“`|exe_sol=`” => “`\205exe_sol=`”
“`|res=`” => “`\205res=`”
“`|notes=`” => “`\205notes=`”
“`|solcat=`” => “`\205solcat=`”

File To be Modified

`cbr.map, cbr_back.map`.

If the first line of this file starts with the word “`begin`” - delete the line. Globally search and replace in the order listed the following two operations:
“`:cnum=`” => “`:`”
“`cnum=`” => “`:`”

Files To be Modified

`sol_list, prob_list, sol_list.bak, prob_list.bak`.

The following operations must be applied to each of the above files:

Delete any leading spaces on all lines.
Delete any leading numbers (if followed by either a “`)`” or “`.`”).

Delete any leading spaces on all lines again.
Verify that there are no duplicate lines in the file.

Once you have done this, you will also have to update any backup copies of these files made by SpectroRx. The location of these files can be determined by checking the `db_dir_backup` variable (as documented in the "Customizing the Environment" section of the SpectroRx manual).

Known SpectroRX Anomalies in SPECTRUM 6.5

Problem 1: SpectroRx Perl scripts may not run from a command window on the Windows NT or Windows 2000 platforms.

Solution: This problem concerns file associations and the version(s) of Perl that is (are) installed on the system. The associations between the SpectroRx scripts and the SPECTRUM installed version of Perl (5.004_04) have not been created. If a different version of Perl has been installed, and file associations created, that version of Perl will be used execute the scripts. As a result, the scripts may fail. The scripts will execute correctly if run in a bash shell window.

Problem 2: Using meta characters (e.g., *) or unmatched quotation marks in a query will result in undefined search results.

Problem 3: When running SpectroRx from a command line, warning messages of the following type may appear on your screen:

`"Use of uninitialized value at <script_name> line xxx"`

This problem concerns the use of the `-w` option when executing Perl (from within the `cbr` executable). These messages can be safely ignored.

Problem 4: [**SpectroRX Web Interface**] If you do not have sufficient permissions to access SpectroRX files, when you select **View All Cases** through a Web browser (`$SPECROOT/SG-Tools/CBR/cbr.cgi`) and click **OK**, no cases are retrieved and the case library is empty. If you do not have

write permissions on the CBR/SpecRX directory you receive the error message: `Unable to log errors!!.`

Solution: Change the permissions for all users in the CBR/SpecRX directory to Read/Write (drwx rwx rwx).

RingView for Token Ring

RingView for Token Ring is a SPECTRUM application program that provides enhanced capabilities for modeling and displaying the ring of devices and connections that make up a Token Ring (802.5) Local Area Network (LAN). An important feature of the RingView application is that it allows for several different ways of displaying a Token Ring LAN within a SPECTRUM Topology view. For example, you can choose to view the topology in an actual ring, or in a “condensed” configuration that requires less screen space. You can also choose between Token Ring stations being depicted as physical devices or MAC entities.

Known RingView For Token Ring Anomalies in SPECTRUM 6.5

Problem 1: RingView cannot fully map connections within a ring that is configured with multiple hubs or concentrators. This is because the Token Ring device firmware stops mapping MAC addresses to specific ports as soon as it encounters one of the Ring In/Ring Out ports through which the hubs are connected. Since SPECTRUM’s fault isolation is based on connections between models, this firmware limitation may result in situations where alarms are not reported or are reported incorrectly. Normally, if SpectroSERVER loses contact with a router that connects to a Token Ring LAN, the icons within the LAN’s Topology view flash gray to indicate that their condition was unknown. If connections within the ring were not fully mapped, then the Token Ring devices would have no known neighbors as far as SPECTRUM is concerned, and would thus flash red.

Solution: When Ring In/Ring Out ports are being used to connect hubs within a Token Ring LAN, you must resolve port connections manually to ensure accurate alarms and fault isolation.

SPECTRUM Reports

SPECTRUM's design is based on a client-server model where SpectroSERVER (VNM) includes a database. This database provides storage for the specific device configurations and contains a modeling catalog (model types and relations) that is the structure for all your network information. By modeling devices in the database, SPECTRUM provides a wide range of information about network devices and network structure even when a device is powered-off or contact is lost. While this information resides in the database it serves no purpose to you unless it is retrieved and displayed in a report. The SPECTRUM Report Generator application performs this task for you. The Report Generator is your guide through the history of your network. You can use this tool to help gain a better understanding of what has happened to your network. Through a good understanding of past performance, you can prevent problems in the future and continue efficient operations.

Note:

Be aware of the following when you use SPECTRUM Reports:

- In the Report Formatter, if the expression exists within a report format that you want to modify, do not remove any attributes that are located in columns before the expression column.
- If you are using top-n in the line data of a Statistical report, the summary portion, where the totals are displayed, is based on the entire report, not just the sorted data.
- On the Solaris platform, if scheduled reports are not occurring at their specified time, it may be necessary to stop and restart your cron daemon. Contact your system administrator for more details regarding cron on your workstation.
- The <poll time> fixed data type should not be used in an expression.
- In Graphical Reports, if data cannot be obtained from a device or a model at a given time, the data for that time is graphed as 0.
- In Graphical Reports, respecifying a .GRF file is treated the same way as Loading one. That is, if any options are stored in the .GRF file, they will be reloaded whenever a Respecify or Load is performed.
- If you create an attribute with the Model Type Editor and want to place it in a Report Header, you must set the Readable, Writable, and Database flags for that attribute; otherwise, that attribute will be blank.

Corrected Reports Anomalies in SPECTRUM 6.5.

1. When you save a report format in the SPECTRUM Report Generator with an uppercase name extension such as **`.RIB (Report Information Block)`**, or with spaces in the name such as **`test alarm.rib`**, it will no longer cause the report generation to fail.
2. When you open (and leave open) the Reports Generator and set up an Alarm report on Windows NT, the second dialog that tells you that the report has completed now contains data.
3. On Windows NT when you print multiple pages, no longer does each page get a Windows NT print dialog displayed asking for the printer selection. This no longer occurs on Solaris even when an invalid printer name is entered.
4. When displaying a report graphically on Windows NT, the pie graph no longer appears white instead of red when it has a value.
5. On a Windows NT SpectroGRAPH that is running against a Solaris SpectroSERVER and you try to start the Report Generator, the executable now successfully starts.
6. Using the Window Manager to close windows no longer causes inconsistent results.

Known Reports Anomalies in SPECTRUM 6.5

Problem 1: On the Solaris platform, if a Rib file does not exist for a selected model type, saving a file using the Statistics template under the Report Formatter causes the file to be saved in the `Templates` directory rather than in the `Statistics` directory.

Solution: Choose the **Save As** command and navigate to the appropriate model type directory to save your file.

Problem 2: If a reports output directory specified in the `Reports` resource file does not exist and you try to bring up the Reports Display, you get a list of all files in the current directory.

Solution: Make a backup copy of the `Reports` resource file. Edit the output directory parameter in the Reports resource file so it specifies a valid directory.

Problem 3: In the Report Formatter, if you attempt to add a `Compute` field at the end of either the Line Data or Summary Data regions, data corruption may occur.

Solution: If you need to place a `Compute` field at the end of a line, make sure that the Page Width setting is large enough to accommodate the `Compute` field.

Problem 4: In the Report Formatter on the Windows NT platform, if you preview the Rib file currently being worked on, the last line may contain a couple of extra characters.

Solution: The extraneous characters do not appear in the saved Rib file or in the report.

Problem 5: On the Windows NT platform, colors on Up/Down Time report pie graphs that have small percentages of uptime or downtime may not appear correctly (either no color appears or colors are inverted).

Solution: This is not a problem with SPECTRUM Reports but rather with a defect with Neuron Data (their defect #10660).

Problem 6: On the Windows NT platform, colors on Alarm report pie graphs may not appear correctly or may be obscured. For example, pie pieces are colored over by other pie pieces when values are close to zero (0).

Solution: This is not a problem with SPECTRUM Reports but rather a limitation of Neuron Data.

Problem 7: On the Windows NT platform, a user who is not a member of the Administrator's group cannot run the Windows NT Scheduler. This is a restriction of Microsoft's Windows NT Schedule Service.

Solution: When Microsoft Internet Explorer 5.0 is installed on your PC, the Windows NT 4.0 Schedule Service (`Atsvc.exe`) is upgraded to the Task Scheduler Service (`mstask.exe`), which enables you to assign different user accounts to run scheduled tasks.

Problem 8: When on a Windows NT SpectroGRAPH that is running against a Solaris SpectroSERVER, if you try to start the Report Generator, the executable starts and tries to appear but then blinks and fails to start.

Solution: Add the remote server's landscape handle in the `*PreferredLandscapes` handle found in the Reports file located in: `$SPECROOT/app-defaults/Reports`. Scroll down to `*PreferredLandscapes` and add the remote server's landscape handle.

Problem 9: When running a Graphical Report on Windows NT, the pie chart displays wrong colors for alarms in its pie slices.

Solution: This is a known problem with Neuron Data. Blaze Software has assigned case # 40684 to this problem.

Problem 10: On the Solaris platform, the Graphical Report connects two data points when the SpectroSERVER is shutdown without showing it shutdown as a gap. You have to infer from the polling times that there existed a period when data was not getting logged into the database.

Solution: This is a limitation of Neuron Data's graphing implementation. The gaps in the polling and log times are represented in the data points.

Problem 11: When scheduling a Report or a Data Export through Windows NT using Internet Explorer 4.0.x, you cannot see previously saved entries once you exit and then reenter the Scheduler view and thus cannot delete or modify them.

Solution: To solve the problem in **Reports**, upgrade to Internet Explorer 5.0 or greater and set the schedule service requirements for Windows NT as specified in the ***Report Generator User's Guide***.

In **Data Export**, the filtering mechanism fails to work correctly. As a workaround, upgrade to Internet Explorer 5.0 or greater and then view, add or modify Data Export entries in the Scheduler on the Control Panel. This problem will be corrected in a future release of SPECTRUM.

SpectroGRAPH

SpectroGRAPH provides the graphical user interface that you use to monitor your network and launch other client applications. SpectroGRAPH's views contain a variety of icons that represent the different elements of your network, including devices, users, and "conceptual" elements such as LAN segments. Each icon presents status information and provides access to management facilities specific to the network element it represents. The information presented by an icon is retrieved from a corresponding model that is maintained in SpectroSERVER's database. Through the use of the GIB (Generic Information Block) Editor, you have the means for on-line creation and modification of SPECTRUM information views within the SpectroGRAPH User Interface. The GIB Editor allows customers to customize the data and graphs associated with information views.

Corrected SpectroGRAPH Anomalies in SPECTRUM 6.5

1 On Windows NT, SPECTRUM applications now respond after selecting "Minimize All Windows."

Known SpectroGRAPH Anomalies in SPECTRUM 6.5

Problem 1: In the Stack Link View on the Windows NT platform, the pipe connecting the two model is split horizontally with black on top and green on the bottom.

Solution: This is a visual problem only derived from a bug in Neuron Data's toolkit (ND Defect #11069). This problem will be addressed in a future release of SPECTRUM.

Problem 2: On the Windows NT platform, when you enable "`See contents of windows while dragging`" in the Display Properties, the display and performance of various SPECTRUM applications (i.e., SpectroGRAPH and Model Type Editor) may be affected.

Solution: Avoid enabling opaque window dragging by not turning on "`Show window contents while dragging`." This feature can be turned off in **Control Panel|Display|Plus!**. This problem may be corrected in a future release of SPECTRUM.

Problem 3: On the Solaris platform, when you change the background size of the Universe view to a larger size than the default size, close the edit, maximize the view, and then move the view, the menus appear to remain back at the position where the view was before moving it. Menus appear to be floating outside the view.

Solution: This is a problem with MOTIF. Sun Microsystems has been alerted to this problem which is under investigation. Try to avoid resizing the SpectroGRAPH window.

Problem 4: On the Windows NT platform, when you print a Graphical Report Format (.GRF) report on a Hewlett-Packard series 5 printer, the X and Y axis as well as part of the heading are missing. However, on screen they display correctly.

Solution: This is a Neuron Data problem (Neuron Data bug ID #8843).

Problem 5: When a user is running an application against a server from another workstation other than the one they were created on, that user will not receive updated changes to the Preference files. This is a normal condition. When preferences are modified from the original defaulted values, the changes get saved to the user preference (.*prf) file in the user's home directory. Since the file is in the user's home directory, other users in the group are not able to "share" the modified preference values if they are running applications from a remote desktop.

Solution: This is a normal result of SPECTRUM security. Aprisma may investigate a way to change preference setting to distinguish between preconnect preferences and those preferences that get saved to the Server in the User Group model.

Problem 6: On Windows NT, individual user preference configuration files from the User Editor (.prf files) are stored in the root directory instead of the user's directory after their creation. If later another user launches the application, those files get overwritten.

Solution: Create a Home Directory for each User Profile using the Windows NT User Manager. This ensures that each user has a unique home directory, unless the Windows NT administrator set it to the same value for each user.

Problem 7: On Windows NT 4.0 Server with Service Pack 6a, when you double click a SPECTRUM .prf file, the operating system mistakenly launches Microsoft's Content Advisor for Internet Explorer 5.0. There is a Registry entry under HKEY_CLASSES_ROOT that identifies .prf files as "PICSRules Files" (also a .prf) which conflicts with SPECTRUM's .prf files. To edit a SPECTRUM .prf file, open it with a text editor. Selecting and opening the .prf file has no adverse effects.
Secondly, another conflict exists between .crt files created by Search Manager when exporting a Search, and Microsoft's .crt files which identifies Microsoft's Security Certificates. Search .crt files cannot be edited manually and should not be directly opened. This extension conflict was resolved with the release of SPECTRUM 6.0rev1.

Solution: These problems will be addressed in a future release of SPECTRUM.

Problem 8: When some applications on a Solaris workstation are remotely displayed on a Windows NT workstation you can no longer use the keypad to enter numbers into an IP address field or any other field requiring numeric input.

Solution: This is a known bug with Neuron Data and not with SPECTRUM. Neuron Data has been made aware of it and they have assigned Bug #: 9458 to the problem.

Problem 9: When a SPECTRUM 6.5 version of SpectroGRAPH is connected to a 5.0rev1 SpectroSERVER, some applications may not be able to secure a connection.

Solution: SPECTRUM does not support new connections of SpectroGRAPH 6.x clients to a SPECTRUM 5.0rev1 SpectroSERVER. Many applications will not connect and those that do will render unpredictable behavior. SPECTRUM supports neither a 6.0.0, 6.0.1, 6.0.2, 6.0.3, nor a 6.5 SpectroGRAPH connection to pre-6.0rev0 SpectroSERVERS.

Beginning with the release of SPECTRUM 6.0.3, a SpectroGRAPH connection to a pre-6.0rev0 SpectroSERVER may result in warnings or errors.

Problem 10: The multi-attribute line graph on a device's Performance view does not represent accurate 10 minute blocks of time in the X-Axis labels when you scroll back in time for data.

Solution: Aprisma is aware of this problem. No determinations on its disposition have yet been made.

Problem 11: When the `createdate -- 0x00011b47` attribute is used (such as in the Attribute Browser) it returns erroneous data.

Solution: Use the `createtime` attribute which deals with both date and time. The `createdate` attribute will be removed from the database in a future release of SPECTRUM.

Problem 12: In the Universe view when you navigate to View -> Jump By Name, enter a SpectroSERVER name (VNM), click **OK**, then choose the VNM and click **OK**, you are in the local landscape view. But when you Jump by Name to the local landscape option, you receive an error message that reads, `Cannot Jump to the Model`. Thus, you are unable to view models in the landscape in the Jump By Name option.

Solution: This problem may be addressed in a future release of SPECTRUM.

Problem 13: Icon sound files were removed in SPECTRUM 6.0.0 because desktop systems now include their own sound drivers. The following sound icons were removed from SPECTRUM: ICON_SOUND and ICON_ROLLUP_SOUND. However, some Snd files may still be present in SPECTRUM 6.5 which causes the following error message to appear if you launch SpectroGRAPH from the command line:

```
CsExecutive::NewIcon - Icon type Snd cannot be created
because it is not linked into the SpectroGRAPH.
```

Solution: An installation of SPECTRUM 6.5 on a machine that has never had SPECTRUM installed eliminates this error message. SPECTRUM

installations that were new beginning in 6.0.x are not affected by this problem.

Problem 14: On Windows NT, if the DISPLAY environment variable is set, the Exceed server (Exceed 6.2) will not start automatically causing SpectroGRAPH and other X applications not to start.

Aprisma is in progress of debugging this problem for a solution.

SpectroSERVER (VNM)

SPECTRUM's design is based on a client/server model. The server, SpectroSERVER or Virtual Network Machine (VNM), includes the SPECTRUM database and provides security, modeling capabilities, and device management facilities. SpectroSERVER supports a suite of client applications through its Application Program Interface (SSAPI).

Note: Database recovery is required following an unplanned SpectroSERVER shutdown in SPECTRUM 6.0. Failure to do so could result in further difficulties and database corruption.

Corrected SpectroSERVER Anomalies in SPECTRUM 6.5

1. When you attempt to stop the MySQL service on Windows 2000 the service now stops.
2. The problem where some external List-type Attributes have an OID Reference display with a "[ ]" flag (when they should display an E, R, or W flag) in the Attribute Browser has been corrected.
3. SPECTRUM 6.0 does not log External List-type Attributes that have an OID Reference. The problem where you have set the Logged flag in the Model Type Editor for an Attribute that has the External flag set (that is a List-type with an OID Reference) and where you cannot access data for the Attribute using Data Export, Reports, or a GIB Graph, has been corrected.
4. On Windows 2000, when you turn off the collection or calculation of operating system performance counters using the Windows 2000 tool "ExCtrLst", SpectroSERVER no longer crashes.

Known SpectroSERVER Anomalies in SPECTRUM 6.5

Problem 1: On the Windows NT platform, SPECTRUM may not recognize NT user accounts because of case-sensitivity even though they exist in the SPECTRUM User Database.

Solution: Ensure that the SPECTRUM user name and Windows NT account name are spelled identically and have the same case.

Problem 2: On the Windows NT and Windows 2000 server, the operating system is optimized to function as a file server by default. This causes the virtual memory system to give precedence to file cache when deciding which memory pages are eligible to be paged out. When large files are open as in the case with large SpectroSERVER and DDM databases, this can cause all of the available physical memory to be used for file cache. As available physical memory gets low, SpectroSERVER (as well as other applications) will have their executable code paged out in favor of maintaining the file cache. This results in very poor application performance. In extreme cases, SpectroSERVER itself may shut down with a low memory error.

Solution: Change the default setting of the Windows paging algorithm. On the Windows NT Server, change the setting located in:**Control Panel-> Network-> Services-> Server-> Properties** from “Optimize Throughput for File Sharing” to “Balance.”

On Windows 2000 Server, change the setting located in: **Settings-> Network and Dial-up Connections-> Local Area Connections-> Properties -> File and Printer Sharing for Microsoft Networks-> Properties** from “Optimize Throughput for File Sharing” to “Balance.”

Problem 3: The Event Log and Alarm Manager will give you misleading connection status. If the Archive Manager runs with the wrong landscape handle, it will correctly generate an orange alarm indicating that no connection has been established. Yet, the connection status dialog in Alarm Manager and Event Log is green indicating that they are connected to the Events Service.

Solution: The Alarm Manager receives its alarms from SpectroSERVER's landscape. When an attempt is made to connect to the Archive Manager to get the events associated with the selected alarm, that connection is routed to the "default service" which is SpectroSERVER. SpectroSERVER supports the default, but the requests will fail. However, the connection to the server as the event service (default) is up/established - thus, the connection dialog shows the green connection to events. The default service is in place as all service was previously defaulted to SpectroSERVER.

Problem 4: When you start SpectroSERVER on the Solaris platform and stop processd then restart processed, the SpectroSERVER does not reconnect making it impossible for clients to be launched. Although Control Panel shows a SpectroSERVER is running, when a SpectroGRAPH is launched you will receive the error message:

```
Could not find any SpectroSERVERs. The Location Server may
be improperly configured, there may be no SpectroSERVERs, or
the host configuration access privileges may be improperly
configured.
```

Solution: Avoid stopping processd without first stopping the SpectroSERVER. This is will be addressed in a future release of SPECTRUM.

SpectroWATCH

The Watch Manager and Watch Editor applications provide you with a mechanism for easily adding thresholds and logging historical data without having to program new modules or modify standard Generic Information Block (GIB) views. These applications allow selected elements to be monitored at a higher level of detail while providing data to be used with other tools used in network analysis.You can dynamically apply watches on any type of attribute, log historical values of attributes, and monitor attributes against thresholds to generate events and alarms.

Corrected SpectroWATCH Anomalies in SPECTRUM 6.5

1 You can now see all of the models in the Jump menu on the Solaris platform when more than 34 models are selected before WatchManager and WatchEditor are invoked.

Known SpectroWATCH Anomalies in SPECTRUM 6.5

Problem 1: Watches which produce a result that is greater than a 32-bit integer cause an error message to appear in the watch's Status in **Watch Editor** which reads:

```
Failed - Overflow in binaryoperator. ,
```

and the message,

```
Failed in the Performance View's Value column.
```

This problem affects watches derived from the `Packet_Rate`,

`Error_Rate`, and `Discard_Rate` attributes, respectively. Each of these watches also use the `Total_Packets_Delivered` attribute.

Solution: This problem will be corrected in a future release of SPECTRUM.

Problem 2: When you create a watch, give it an attribute, and you do not set or change it to the appropriate Data Type (defaults to Boolean), after you create a Threshold violation that requires Integer as the Data Type, and then click **OK** to finally create the watch, you receive an error message that indicates "`Incompatible types.`" But when you attempt to change the Data Type from Boolean to Integer, you receive a second message which says:
`Could not create the watch. Watch Source: Existing assignment is of type Boolean, user specified type integer.`

`You can't correct the mistake and must restart the watch creation process.`

Solution: This problem will be corrected in a future release of SPECTRUM.

Level I Developer's Toolkit

The SPECTRUM Level I Developer's Tools are designed to allow Original Equipment Manufacturer (OEM) developers to integrate their products into SPECTRUM, and to allow developers at customer sites to customize SPECTRUM to suit the site's specific needs.

Product Description

Packaged as optionally-purchasable modules, the following Level I Developer's Tools are available:

- **SPECTRUM Model Type Editor (MTE)** - The primary tool used to create and modify SPECTRUM model types. With the MTE, developers can customize existing model types to meet specific needs, or derive new model types, attributes, and extensions from previously defined ones. The MTE allows customer control over each model type attribute, beyond the limited access available with the basic SPECTRUM core product and allows developers to import proprietary vendor MIBs into the SPECTRUM knowledge base.
- **SPECTRUM Basic Extensions Toolkit** - The Basic Extensions Toolkit has been improved in the following ways: the `mmbuild` tool can be used to create or remove SPECTRUM files (EventDisp, Alertmap, Perspective Information Blocks or "PIBs", Generic Information Blocks or "GIBs"; Icon Information Blocks or "IIBs", etc.) associated with new model types. The `mmship` tool can be used to create index files for distribution of new model types.
- **SPECTRUM Extensions Integration (SEI) Toolkit** - Intended for customers or Value Added Reseller (VAR) developers who wish to package and sell a SPECTRUM extension they have developed. This toolkit enables a developer to produce a complete, ready-to-install SPECTRUM extension. The toolkit includes tools and information for integrating a customer-developed extension with the SPECTRUM CD formats and the SPECTRUM installation script. CDs created using the SEI Toolkit utilities will be installed at a customer's site. Purchasers of

the toolkit receive a unique Developer Identification Code to ensure that their SPECTRUM extensions can be integrated into any SPECTRUM site in the world.

Known Anomalies in Level I Developer's Toolkit

Model Type Editor

Problem 1: Attributes of an unsupported type must be created manually. Attempts to use the MIB compiler causes the Model Type Editor to report the attribute type is unsupported and the attribute will not be created.

Solution: Refer to ***Model Type Editor User's Guide*** for clarification.

Problem 2: When you run the MTE and import a MIB with an object name longer than 30 characters, you receive the Success message (even though the object did not import) that says:

```
The MIB was successfully imported.
```

In a terminal window or on the Control Panel itself, you see error messages for the MIB objects (with names of more than 30 characters) that failed to import.

Solution: There are two workarounds. The first is to identify each MIB object with 30+ characters in its name and shorten the name before running the MTE. The second (which only applies to attributes in truncated group names) is to find the attributes that are listed as `<no group>` and manually assign the truncated group name in the Attribute View.

If the MTE was run from the Control Panel, a list of MIB objects that did not import will be displayed on the Control Panel.

If the MTE was run from the command line, a list of MIB objects that did not import will be displayed in that window.

In the future, users will see the Success dialog only when no errors have occurred and an error dialog listing all errors if they occur. This problem will be corrected in a future release of SPECTRUM.

SPECTRUM Web Operator

The SPECTRUM Web Operator combines enterprise-wide management features with a flexible Web browser interface and allows access to the SPECTRUM Knowledge Base from a Web browser at any time, from anywhere. Web Operator also provides a tightly integrated foundation for current and future applications.

The Web Operator Foundation consists Alarm Manager, Alarm Ticker, Model Browser, Quick Search, and User Administration applications.

The Web Operator Suite, in addition to the foundation applications, consists of Model Search, Custom Collections, Alarm and Event Reports, and Alarm and Event Presentation Editors.

The entire Suite allows time-saving interactive access to distributed SPECTRUM data through simple, easy-to-use Web browser interfaces.

Note:

The **Web Operator Foundation** directory and files are found in the following location on the SPECTRUM applications CD:

`/cdrom/spectrum/WebOperator/Foundation`

The Web Operator Suite directory and files are found in the following locations on the SPECTRUM applications CD:

`/cdrom/spectrum/WebOperator/Suite`

Known Custom Collections Anomalies in Web Operator Suite 6.5

Problem 1: If the SpectroSERVER, that contains Home User Models, is reinitialized the Custom Collections that were created will no longer exist for the users and will need to be recreated.

Problem 2: You cannot create a Custom Collection when logged in as a read-only user even though this option appears to be available. You will get an error message after trying to create a collection. It is recommended that the Custom Collections application be disabled for read-only users by using the User Administration tool.

Problem 3: In a distributed environment, if a SpectroSERVER database, that does not contain the Home User Model, is reinitialized after a Custom Collection has been created, you may see different models displayed in your collection. The models in the collection that were on the SpectroSERVER that was reinitialized should be removed from the collection and added again as the model handles stored in the collection could be representing different models.

Known Model Search & Custom Collections Anomalies in Web Operator Suite 6.5

Problem 1: If a user does not have a consolidated Home User Model, User defined searches and Custom Collections will behave inconsistently as they are both stored in the User Model. For information on consolidating User Models, see the ***Security and User Maintenance*** documentation.

Problem 2: When you attempt to add more than 115 models to a collection or delete more than 95 models from a collection, an “error on page” message appears.

Solution: The maximum number of models that can be successfully added to a collection at one time is 115. The maximum number of models

that can be successfully deleted at one time is 95. To resolve this problem, keep adding 115 or fewer models until the desired number of models is added to the collection, or keep deleting 95 or fewer models until the desired number of models are deleted from the collection.

Corrected General Anomalies in Web Operator Foundation and Suite 6.5

1. At the login page of Web Operator, if you are running Microsoft Internet Explorer and you do not have the Java Plug-in installed, a popup will appear informing you that you will need to install the Plug-in. This program **crashed** while attempting to download the installation files. **Java 1.3.1** Plug-in is now downloadable from the Web Operator server so this problem will no longer occur.
2. In Netscape, while running Web Operator in one browser window, if you open another browser window, log in to Web Operator and click on an application link there is no longer a splash screen problem.

Known General Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: When using Netscape, if you resize the browser window while in the Web Operator, any filter and/or sorting settings you have made will be cleared.

Problem 2: If the login screen is brought up and left idle for 30 minutes, you will have to enter login information twice to gain access to Web Operator.

Problem 3: On Solaris, the User Administration tool and the Alarm and Event Presentation Editors require that you use cut and paste to move items (Groups, Users, Alarm Types, etc.); drag and drop will not work. This is a problem with the Java Plug-in on Solaris Netscape.

Note that on Windows (NT, 2000) both cut and paste and drag and drop methods will work.

Problem 4: When a current Web Operator session times out, you may see a variety of anomalies in the behavior of several applications. Here are examples:

- If an action is taken just prior to a session timeout, you must verify that the action took place as it may not have been successful.
- If a session timeout occurs while you are on the “Choose a Search” screen (the main screen for Model Search), the login screen is displayed when you choose a specific search. After you log in, a search results screen is immediately displayed, e.g., “Results of Bridge Search”; if your model search is still being performed, the login screen remains displayed until the search is complete.
- If you log back in after Alarm or Event Reports has timed out, the previous, timed-out browser window remains in the background.
- When bookmarks are used for any Web Operator application, a truncated login screen may show up in the tool bar area in addition to the functional login screen on the main application page.

Problem 5: If you resize a login screen when running Netscape, it may cause the browser to crash. This is a Netscape problem.

Problem 6: When using Windows Internet Explorer 6.0, you may need to click the **Back** button two or more times to go back to the previous screen.

Corrected Installation Anomalies in Web Operator Foundation and Suite 6.5

1. When you click **Next** on the "Web Administrator User" installation screen, you commit the specified user to be the administrator. You are now able to update this user when you return to the Web Administrator User installation screen, by using the **Previous** button, and enter a different user name.
2. Port 80 is now used for the SPECTRUM Web Operator's server port since this no longer causing double login problems in Netscape browsers. Note that the port number you assign for Web Operator must be greater than 1024 (to avoid privileged port numbers) and must NOT be 8007 as this is the port number the SPECTRUM Web Operator installed Tomcat server uses.
3. When you select the "Populate with all SPECTRUM Users" option in the Web Operator Users installation screen, the installation program successfully adds all SPECTRUM users to Web Operator.

Known Installation Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: On Windows NT, the `%WINDIR%\system32\MSVCRT.DLL` file needs to be version 6.0 or greater. If it is not then you will receive the following error during the install:

```
The procedure entry point_lc_collate_cp could not be located
in the dynamic link library MSVCRT.dll
```

To resolve this problem do the following steps:

1. Close every program you can stop on your desktop.
2. Stop every NT service you can stop -
   Start->Settings->Control Panel->Services
   then select every service and click on stop.
3. Start the NT Task Manager and from the **Processes** tab, select **`EXPLORER.EXE`** (i.e., Windows NT Explorer), click **End Process**. This kills the desktop explorer, but leaves the NT Task Manager running.
4. From the **Applications** tab, click **New Task**.
5. Enter **CMD** in the field. This runs the Command Prompt window.
6. Close the Task Manager Window.
7. In the Command Prompt Window, cd to `%WINDIR%\system32` and rename the `msvcrt.dll` to `msvcrt.dll.old`.
8. Still in the Command Prompt Window,
   copy `<install directory>\WebApps\Install-Tools\MSVCRT.DLL` to
   `%WINDIR%\system32`,
   where `<install directory>` is the directory in which you attempted to install SPECTRUM Web Operator.
9. Reboot your machine and start the SPECTRUM Web Operator Installation again.

Problem 2: Clicking the **Previous** button in the Web Administrator User screen before adding the Web Operator administrator will prevent the installation program from adding the Web Operator administrator, as well as Web Operator users.

Solution: Re-install Web Operator without clicking the previous button, as explained in the following procedure:

1. In the Main Location Server screen, click the **Next** button to complete the installation (without adding users).
2. Uninstall Web Operator as described in the ***SPECTRUM Installation Guide*** (9030675).
3. Re-install Web Operator, without clicking the **Previous** button.

Problem 3: When you install Web Operator on a server that has underscores in the hostname (for example, *host_server*), clients receive a "page cannot be found" message when attempting to connect.

Solution: In the `httpd.conf` file, change the ServerName option from the hostname to the IP address of the Web Operator server, as explained in the following procedures:

To change the ServerName option on Windows NT and Windows 2000:

1. From the command prompt, run the following command:

   ```
   net stop spectrumapache
   ```

2. On the Web Operator Server, open the following file:

   ```
   <install directory>\SPECTRUM\WebApps\apache\conf\
   http.conf
   ```

   where `<install directory>` is the directory in which you installed Web Operator.

3. In the ServerName option, enter the IP address, not the hostname of the Web Operator server.
4. Save and close the `http.conf` file.

5 From the command prompt, run the following command:

net start spectrumapache

6 Do one of the following:

- If the port you specified during installation is 80 (the default), point your Web browser to the following URL:

  http://<*host IP*>/spectrum/

  where <*host IP*> is the IP address of the machine on which you installed SPECTRUM Web Operator.

- If the port you specified during installation is not 80, point your Web browser to the following URL:

  http://<*host IP*>:<*portnumber*>/spectrum/

  where <*host IP*> is the IP address of the machine on which you installed SPECTRUM Web Operator and <*portnumber*> is the port number specified during the installation.

To change the ServerName option on Solaris:

1 Log on to your Solaris server as root.

2 Stop the Apache Web Server.

/etc/init.d/WOapache stop

3 On the Web Operator server, open the following file:

<install directory>/SPECTRUM/WebApps/apache/conf/http.conf

where <install directory> is the directory in which you installed Web Operator.

4 In the ServerName option, enter the IP address, not the hostname of the Web Operator server.

5 Save and close the http.conf file.

6 Start the Apache Web Server.

/etc/init.d/WOapache start

7 At the Web Operator client, do one of the following:

- If the port you specified during installation is 80 (the default), point your Web browser to the following URL:

  `http://<`*host IP***`>/spectrum/`**

  where <*host IP*> is the IP address of the machine on which you installed SPECTRUM Web Operator.

- If the port you specified during installation is not 80, point your Web browser to the following URL:

  `http://<`*host IP***`>:<`***portnumber***`>/spectrum/`**

  where <*host IP*> is the IP address of the machine on which you installed SPECTRUM Web Operator and <*portnumber*> is the port number specified during the installation.

Problem 4: Web Operator is unable to connect to any SpectroSERVER, or to get a list of servers from the main location server if there is no SpectroSERVER running on the main location server (or no valid user for the Web Operator server).

Solution: In the `WebApps/SG-Support/CsResource/preferences/ssroe.prf` file, set the landscape handle to the landscape handle where the home user model is located. This can be done before you click the **Next** button on the "Populate Web Operator Users" wizard screen in the install. If the "Populate Web Operator Users" wizard screen hangs then you can end the process, set the preferences, and try to obtain users again.

Known Model Browser Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: If the SpectroSERVER database has been reinitialized and you have bookmarked Model Browser views you will need to add the bookmarks again as the bookmark may represent a different model.

Problem 2: If you click the **Destroy Pipe** button without selecting a

model, Web Operator does not launch an “Operation Failed” message informing you that the pipe was not destroyed because nothing was selected.

Problem 3: When you telnet to a device that does not support incoming telnet sessions, an error message appears briefly. This message appears so quickly that a user will not notice it, especially on a Solaris workstation.

Solution: Change the default browser to one that supports better user interaction.

To change the default telnet application in Netscape:

1. On the **Edit** menu, click **Preferences**.
2. Click the **Navigator** category, and then click **Applications**.
3. Click the **URL: Telnet Protocol** Application.
4. Click the **New Type** button and browse for the telnet application you want to use.

To change the default telnet application in IE:

1. Open Windows Explorer.
1. On the **Tools** menu, click **Folder Options**.
2. In the Folder Options dialog box, click the **File Types** tab.
3. In the list of registered file types, click **URL: Telnet Protocol**, and then click the **Advanced** button.
4. In the Edit File Type dialog box, click the **New** button and browse for the telnet application you want to use.

Corrected Alarm Manager Anomalies in Web Operator Foundation and Suite 6.5

1 If Alarm Manager runs for a long period of time it no longer gets data for all frames or print nonsensical data.

Known Alarm Manager Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: Netscape 4.7 on Solaris 2.7 may not contain scroll bars on the right side of the Alarm Manager list. Expanding the window vertically will create the necessary scroll bars.

Problem 2: Alarm Manager will freeze if SpectroSERVER goes down while gathering data.

Problem 3: Internet Explorer will crash if you use the middle mouse scroll feature while an Alarm Manager screen refreshes. This is an Internet Explorer problem.

Problem 4: Alarm Manager refresh may cause problems for a large number of alarms over a slow connection. An example of a slow connection would be 28.8 over a modem. This problem can be resolved by changing the refresh rate in the Alarm Manager preferences so that the page does not refresh as often.

Corrected Alarm Ticker Anomalies in Web Operator Foundation and Suite 6.5

1. The Alarm Ticker no longer results in a scrolling “Initializing Application…” the first time a new user logs in.
2. On Netscape 4.7x, if you resize the Web Operator browser window and then choose **Alarm Ticker** from the Web Operator application menu, the ticker no longer displays in a full-sized browser window.

Known Alarm Ticker Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: A maximum of 75 critical alarms will be shown in the Alarm Ticker.

Problem 2: When you resize the Alarm Ticker window horizontally, the data field does not resize with the window. The data field continues to scroll along the same horizontal path as the original window.

Corrected Alarm & Event Reports Anomalies in Web Operator Suite 6.5

1. When running on a Solaris 8 workstation, pie charts accessed by clicking a number link, e.g., “Grand Total,” no longer display incomplete/inaccurate colors and labeling.

Known Alarm & Event Reports Anomalies in Web Operator Suite 6.5

Problem 1: SPECTRUM defined events and alarm probable causes are titled. Any additional events/alarms created by the user will have its

corresponding event code/alarm probable cause number as the title. The Alarm and Event Presentation Editors can be used to give titles to any new probable causes or event codes created by the user.

Problem 2: Groupings of probable cause and event types are not complete. Those that are not grouped will appear in the "Ungrouped" column. The Alarm and Event Presentation Editors can be used to create new groupings of probable causes and event codes or to modify existing ones.

Problem 3: Reports will timeout when clicking on totals if the SpectroSERVER goes down while gathering data.

Problem 4: The totals listed in Alarm Reports should be considered a close approximation rather than a precise sum of generated alarms. Often, if you click an alarm total, the number of items in the report for generated alarms will be exactly the number you clicked. Sometimes, the number will not be exact due to the following causes:

- If the alarm total includes Today, more items listed as alarms could have occurred since DBWriter was run.
- The user does not have permission to read alarm data from SPECTRUM.

Problem 5: Pie Charts on workstations supporting only 8-bit color may contain pie slices without proper 3D shading due to a lack of color resources.

Problem 6: Clicking on large numbers in Reports could cause a browser timeout.

Problem 7: If the Archive Manager database has been reinitialized or not synchronized to the SSDb (per the ***SPECTRUM Database Management*** documentation), the scheduled application for Reports (DBWriter) will need to be re-run to show the currently valid report data. It is also recommended that you remove all
`<install directory>/WebApps/ReportsData/report*.db`

files to initialize the Reports database as well.

Problem 8: When you refresh any Chart View from the browser menu, the Table View is displayed instead of refreshing the Chart View. To correctly refresh the Chart View, right-click in the frame that the chart view is in and perform a Refresh instead of refreshing from the browser menu.

Problem 9: The Search tool for the Alarm and Event Presentation editors will find Groups only if they contain no Titles. This will be corrected in a future release of SPECTRUM Web Operator.

Known User Administration Anomalies in Web Operator Foundation and Suite 6.5

Problem 1: In the User Administration tool, usernames with spaces (e.g., John Smith) can be created but are not supported and will cause a variety of errors to occur throughout Web Operator.

Problem 2: The Search tool for User Administration will find Groups only if they contain no Users. This will be corrected in a future release of SPECTRUM Web Operator.

Management Module Software

Management Module software accompanies the release packages for SPECTRUM. This and the remaining sections of the ***SPECTRUM Software Release Notice*** (SSRN) are intended to alert you to product enhancements, problem resolutions, and anomalies associated with the Management Modules for this release of SPECTRUM.

Please read this information thoroughly so that you will be aware of any changes in the product that could affect your network.

Caution: Installation instructions are not included in this document; however, there are some Management Module conversion scripts that must be run and they are documented in the ***SPECTRUM Installation Guide.*** It is important that these conversion scripts be run following installation of this release of SPECTRUM and prior to using it.

The remainder of this SSRN covers the following topics:

- *New Modules and Functionality* (Page 100) provides brief descriptions of Management Modules and functionality added in this release.
- *Corrected & Known Anomalies* (Page 106) briefly describes the known anomalies, possible solutions, and corrected anomalies associated with this release.

New Modules and Functionality

This section identifies Management Modules that have been added since the last release as well as new functionality that has been added to existing modules.

This section covers the following topics:

- *New Management Modules* (below)
- *Added/Updated Features and Functionality* (Page 101)

New Management Modules

The following Management Modules have been added since the last release of SPECTRUM (version 6.0.3).

SM-ADC1000, Cuda 12000

This new Management Module supports ADC's Cuda 12000 IP Access Switch, which is used by broadband service operators.

SM-DEL1000, Dell Workstations

This new Management Module supports Dell workstations that use the Dell Open Manage and Dell HIP products.

SM-LUC1002, Lucent Ascend CBX

This new Management Module provides support for the Ascend CBX 500 and 550 devices.

SM-NTL1003, Nortel Accelar 8000 Series

This new Management Module provides support for the Nortel 8000, 8100, and 8600 devices.

SM-RVD1000, RiverDelta BSR 1000/6400

This new Management Module provides support for the RiverDelta BSR 1000 and 6400 routers, which provide DOCSIS-based services and applications.

Added/Updated Features and Functionality

The following updates, enhancements, and changes have been made since the last release of SPECTRUM (version 6.0.3).

ATM VCL Link Information Standardization

The menu picks, double-click zones, and display information associated with the ATM VCL Link view have been standardized.

Decrease in SNMP Traffic

The reduction in SNMP traffic on *certain* interfaces that was included in the 6.0.3 release has been extended for *all* interfaces, as follows. The number of attribute reads required to display interface information on the Device Topology view has been reduced. The benefit is a decrease in the amount of SNMP traffic generated by SPECTRUM. Also, the load information displayed on all Interface icons in the Device Topology and Device views has been removed; thus, for this release and beyond, the associated load calculations will not be available for any interfaces.

Enhancements to Cisco Device Management Modules

Syslog Enhancement

This enhancement allows you to filter out syslog events based on the event category. It applies to the following Management Modules:

SM-CAT1002 (Catalyst 5000/5500)

SM-CIS1001 (Cisco Router)

SM-CIS1011 (Cisco Secure PIX Firewall).

Catalyst Fault Isolation Enhancements

These enhancements allow you to (1) preserve connections to a Catalyst device model even if the board that these connections are made to fails or is removed and (2) isolate faults to the Catalyst board level rather than to all the devices to which the Catalyst is connected. These enhancements apply to the following Management Modules:

SM-CAT1002 (Catalyst 5000/5500)

SM-CAT1006 (Catalyst 4000 Switch)

SM-CAT1007 (Catalyst 6xxx).

Cisco IOS 12.1 Upgrade

This upgrade allows switching between the MIBs supported prior to the 12.0 IOS and the new MIBs supported by the 12.0 IOS. This upgrade applies to the following Management Modules:

SM-CIS1001 (Cisco Router)

SM-CIS1002 (LightStream 1010)

SM-CIS1004 (Cisco Access Server Series)

SM-CIS1005 (Cisco MC3810 Multiservice Access Concentrator)

SM-CIS1008 (Cisco 7200 Series Universal Broadband Routers)

SM-CIS1010 (Cisco 6400 DSL)

SM-CAT1008 (Catalyst 85xx)

SM-CAT1009 (Catalyst 3500 Series Switches.

Hot Standby Router Protocol (HSRP) Enhancement

This enhancement provides a means of representing an HSRP group in SPECTRUM; specifically, by suppressing duplicate MAC address alarms when an HSRP virtual IP is modeled. This enhancement applies to the SM-CIS1001 (Cisco Router) Management Module.

SM-CIS1006 Cisco Voice Application

This Management Module has been upgraded to provide counters (line graphs) giving the number of voice-over-IP calls currently active and the total since reset.

SM-CIS1014, Cisco 12000 GSR

This Management Module provides enhanced support for the Cisco GSR12016 and GSR12416 devices.

SM-CIS1015, RTTMON

This Management Module supports the Cisco Response Time Monitor (RTTMON) MIB as a separate Management Module for devices supporting this MIB.

SM-CPQ1000, Compaq Insight Manager

This Management Module has been modified so that information that was accessible from the device-specific Application views is now accessible from the device model Icon Subviews menu option called Host System Health.

SM-EMP1000, Empire Agent

This Management Module has been upgraded to provide access to the Host Performance menu from UNIX and Windows NT systems. Several monitor tables have also been added.

SM-EXT1000, Extreme

This Management Module has been enhanced to provide support for a new bridging MIB for autodiscovery and to use the Extreme Discovery Protocol for autodiscovery.

SM-F5N1000, F5 Big-IP Load Balancer

This Management Module has been upgraded to provide Web server access.

SM-FDR1000, Foundry Networks

This Management Module has been upgraded to add VLAN views and a VLAN topology overlay for Foundry devices.

SM-GEXT, SONET Applications

This Management Module has been enhanced to support devices that utilize rfc1595 and rfc2558.

SM-GHO1000, Generic Host

This Management Module has been upgraded to provide Event Disposition files for all host model types, i.e., Host_Compaq, Host_Device, Host_Sun, and Host_Empire.

SM-JPR1000, Juniper

This Management Module has been upgraded to provide support for the Juniper JUNOS 4.4 software. This includes support for the Juniper Firewall and DCU MIBs.

SM-LUC1003, Lucent Cajun

This Management Module has been upgraded to provide proprietary VLAN support, the ability to call Cajun Web-based configuration tools, and added support for the P330 switch.

SM-NTL1002, Alteon CACHE/ACE Director

This Management Module has been upgraded to provide added proprietary VLAN support and new MIB support.

SM-PKT1000, Packeteer PacketShaper

This Management Module has been upgraded to provide added support to call Web configurations from a device, new MIB information, and added support for two new devices, AppVantage ASM90 and PacketShaper 6500.

SM-RST1000, Riverstone SmartSwitch Router

This Management Module has been upgraded to provide support for several VLAN rate limiting and BGP accounting applications.

SM-SUN1000, Sun Management Center Agent

This Management Module has been upgraded to provide a menu pick in the Topology view to launch the Web interface, which will work if you have the Premier Management Application package. Also, the Management Module now provides double-click access to attribute information in tables. Scrolling to the right is no longer required.

Corrected & Known Anomalies

This section identifies the anomalies that have been corrected since the last release and the anomalies that are known to exist in the current release.

For each manufacturer, the information is listed in the following format, when applicable:

- Table listing the device support
- Corrected Anomalies
- Known Anomalies
  - Problem
  - Solution

Note: Any anomalies affecting multiple Management Modules are listed first. Any SPECTRUM Portable Management Application (SPMA) anomalies affecting various Management Modules are listed last.

Multiple Management Modules

Corrected Anomalies:

1 The following devices and/or model types now clear a link down alarm when a link up trap is received.

DOCSIS	Accelar 1200	StrataCom	SSR 245
DEC GigaSwitch	MD110 PBX	ForeASX200	Host Compaq
LanCity	MotorolaMPRouter	HubSyn29xx	HubUB700
9H532-18	HubSyn5xxx	ESXMIM	9A000
Hub3COMSSTR_A	HubUSRMP	7C04	9E106-06
Micro-22T	9E423-24	9E132-15	9E138-12
CSX200	9G426-02	2M46-04	9T425-16
6H133-37	Rtr_Bay_Wflet	HubSyn27xx	HubCat5000
LS3300	STS 16	UpsApc29xx	ST-1000
AT&T SmartHub	9H421-12	ELS10-26	

Note: The following two problems may apply to all users of SPECTRUM.

Problem 1: If you see red boxes displayed around fields in views, it indicates that data was not attainable from the device. This occurs when SPECTRUM requests data that the device does not support, either due to out-dated firmware or unconfigured functionality.

Solution: Ignore fields enclosed in red boxes.

Problem 2: On some model types, manual changes to environmental variables are not recognized by SPECTRUM until the SPECTRUM Control Panel has been brought down and reopened. For example, this is true with CIMPATH used to launch Compaq Insight Manager, ROAMEXCPATH used to launch an application for RoamAbout, CVIEW used to launch Cisco Works on some Cisco devices, and COPPEREXCPATH used to launch Copper View Element Manger for Copper Mountain devices.

Solution: Restart the SPECTRUM Control Panel when making these changes.

3Com FMS/MSH

Part Number	Devices	Firmware	Release
SM-3CM1004	10BTi FMS SuperStack II MSH Hubs	1.32 2.02 4.01	6.0.3

Known Anomalies:

Problem 1: If you select the icon in the Alarm view of a Hub3ComMSH and then open the Applications view, a small primary application button appears in the view's banner.

Solution: This problem will be addressed in a future release.

Problem 2: For the Hub3ComFMS, the 3ComPollApp's Poll Table view shows an incorrect last "Next Free Index" table value.

Solution: This is a firmware problem.

3Com LinkSwitch 1100/3300

Part Number	Devices	Firmware	Release
SM-3CM1011	LS1100, LS3300	1.06	6.0.3

Known Anomalies:

Problem 1: In the Hub3ComLS3300's Model Information view, changing the Community Name to something other than Public results in the view's Description field becoming red-boxed.

Solution: This device is operating with a non-compliant SNMP agent, which appears to be a firmware problem.

3Com NetBuilder II

Part Number	Devices	Firmware	Release
SM-3CM1001	NetBuilder	N/A	6.0.3

Known Anomalies:

Problem 1: In the 3Com NetBuilder II's IP Security Control Table, the columns `Control, Packet Default Auth`, and `Packet System Auth` show a value of "|" (pipe).

Solution: This problem will be fixed in a future release.

3Com PortSwitch Family

Part Number	Devices	Firmware	Release
SM-3CM1008	PortSwitch Family Hub	N/A	6.0.3

Known Anomalies:

Problem 1: In the 3ComRmonExtApp application, the print buttons located in the Configuration view's rfc1516 Extensions, Host, and Alarm Event tables cause SpectroGRAPH to crash.

Solution: This problem will be addressed in a future release.

Adtran DSU/CSU

Part Number	Devices	Firmware	Release
SM-ADT1000	DSU/CSU	3.31	6.0.3

Known Anomalies:

Problem 1: Devices DSU IQ, TSU IQ, TSU IQ+, and IQ Probe display red boxes in the DLCI Port Configuration view.

Solution: This is a firmware related problem.

AT & T StarLAN10 SmartHUB

Part Number	Devices	Firmware	Release
SM-ATT1000	SmartHUB	10.0	6.0.3

Known Anomalies:

Problem 1: The SNMP Agent Detail view, accessed from the Application or Performance views, shows pie charts with missing data breakdown fields.

Solution: The AT& T StarLAN10 SmartHUB does not fully support MIB I. Some views will not show any information.

Bay Centillion 100

Part Number	Devices	Firmware	Release
SM-BAN1001	Bay Centillion 100	2.2.4	6.0.3

Known Anomalies:

Problem 1: Interface icons in the Device Interface and Device Topology views display port and board labels with an incorrect value of "0."

Solution: This is a firmware problem.

BayStack Ethernet Hubs

Part Number	Devices	Firmware	Release
SM-BAY1000	HubBaySt10x/20x/150/ 300/350		6.0.3

Known Anomalies:

Problem 1: Modeling by IP gives different results than AutoDiscovery. Modeling by IP results in a HubBayStxx/xxx model icon in the Topology view that has incorrect labeling and Icon Subviews menu options. AutoDiscovery correctly results in the creation of a BSEnetRptr model icon.

Solution: This functions as designed in order to provide the functionality of port resolution for the HubBaySt10/150.

Problem 2: Modeling BayStack10x/150 devices by IP or using Container-based AutoDiscovery creates a BSEnetRptr model in the Topology views rather than a HubBaySt1xx model. Also, the BSEnetRptr model takes several minutes before its Contact Status becomes established, which results in the label of the repeater icon being blue for several minutes before turning green.

Solution: The HubBaySt1xx model is still created; however, it must be accessed through the Search Manager.

Cayman GatorStar Repeater/Router

Part Number	Devices	Firmware	Release
SM-CAY1001	RtrCayGBox RtrCayGMIM RtrCayGStar	3.0.3/2.2.0 3.0.3/2.2.0 3.0.3/2.2.0	6.0.3

Known Anomalies:

Problem 1: For Cayman GatorStar models, using the Interface Configuration view to change the Admin status to Off causes the following pop-up dialog box to display:

```
            Update Failed for the following attributes:

Attribute 0x100ca - DCM-OPERATION_FAILED,0x40000006

            or:

Attribute 0x100ca - Attribute does not exist on device, 0x200000a
```

Solution: Cayman does not allow any SNMP sets by remote management. The Management Module functions as designed.

Problem 2: The UDP2_App's UDP Listener Table shows only UDP Local Address information. Other information, including UDP Port, does not appear.

Solution: This is a firmware problem.

Cisco Catalyst

Part Number	Devices	Firmware	Release
SM-CAT1000	SwCat 1200 (Catalyst Workgroup Switch)	4.1, 4.21	6.0.3
SM-CAT1001	HubCat 1400 (Catalyst Workgroup Concentrator)	1.5	6.0.3
SM-CAT1002	HubCat 5xxx (Catalyst 5xxx)	2.1	6.0.3
SM-CAT1008	Catalyst 85xx		6.5.0

Known Anomalies:

Problem 1: The HubCat5000 and HubCat5500 Interface Translation table shows only Interface Index 1.

Solution: This is a firmware problem; the Management Module functions as designed.

Problem 2: Modeling the HubCat5000, opening the Interface Device or Device Topology views, and exiting after the ports configure, causes multiple lines of the following message to appear:

```
CsDIEnumText: No match for Enumerated Value 268836429
```

Solution: This is a firmware problem; the Management Module functions as designed. The device is sending incorrect interface information to SPECTRUM.

Problem 3: For SwCat1200 models, clicking the CATStackApp's Configuration view Clear MAC or Clear Ports button causes a SpectroGRAPH error message to display.

Solution: Use the read/write Community Name when modeling the device. Then, each time you click either button, it clears and sets all MAC and port counter attribute values to "0."

Problem 4: For SwCat1200 models, double-clicking any interface's IF Status label displays the Interface Status view with a red-boxed Port Oper Status field.

Solution: For switches with firmware versions not supporting the trunking status attribute, Port Oper Status will be red-boxed.

Problem 5: In the Device Topology view of the SwCat5505, reconfigured (swapped) boards appear in incorrect numeric order.

Solution: The port information is correct. This is a firmware problem; SPECTRUM reads the incorrect CATStackMib MIB values and therefore cannot reorganize or update the interfaces in a logical order.

Problem 6: The Catalyst 8500 does not display CAT_IF_Ports.

Solution: This is a device related issue. The device does not support the CISCO-STACK-MIB.

Cisco Access Server

Part Number	Devices	Firmware	Release
SM-CIS1004	AS5x00 (Cisco Access Server)	Experimental Version 12.0	6.0.3

Known Anomalies:

Problem 1: The AS5x00 T1 port interfaces 4 and 5 show red-boxed attributes in the Interface Configuration view. Interfaces 1-3 and 6-51 show correct values.

Solution: This is a firmware problem with the Experimental Version 12.0; MIB information for the two attributes is not accessible and red-boxing is appropriate.

Cisco Router

Part Number	Devices	Firmware	Release
SM-CIS1001	Rtr_Cisco (Cisco Router 2) Rtr_CiscoIGS, CGS, AGS, MGS, 2500, 3000, 4000, 7000	11.1(8) 11.2	6.0.3
SM-CIS1002	Lightstream 10.10 (ATM Support)	11.2(5)/ wa3(2b)	6.0.3

Known Anomalies:

Problem 1: The Cisco 3T MIM is not recognized in hub or MMAC chassis views.

Solution: This is a Cisco 3T MIM firmware problem.

Problem 2: Modeling a Cisco 4000 with the Rtr_Cisco4000 model type generates a wrong model type alarm.

Solution: All Cisco routers of firmware version 10 and above should be modeled with the Rtr_Cisco model type.

Problem 3: The CiscoPingApp currently supports only the IP and DECnet protocols. The Ping Request Entry Table cannot display multiple protocol address formats using a single table icon. For that reason, non-IP protocols may display their respective addresses incorrectly in the table view but the device receives the address as entered in the “Add Request” window.

Solution: Additional protocols will be supported in a future release of the Management Module.

Problem 4: Clicking the Ciscoview menu choice, or the CiscoView button in the Cisco Router Management Module (MM), does not work.

Solution: For the Ciscoview functionality, the user must first install the Ciscoview product. Additionally, the path to the executable must be defined as an environment variable **`CVIEW=<path to exe>`**. Place the environment variable in the file **`/opt/SPECTRUM/Spectrum60.env`** for Solaris, and put the environment variable in the System Environment variables (system variables) for Windows NT and Windows 2000.

Problem 5: When the Cisco router is modeled with a Rtr_Cisco model type, some application models do not appear.

Solution: This problem occurs with firmware version 8.1 and earlier. The Cisco Management Module now supports 10.0; with this firmware, the application models should appear.

Problem 6: Some modeled Cisco devices allow you to enter any string under Community Name, or leave this field blank. The model remains green unless you remove the entered string, then the model displays an orange alarm state.

Solution: The Cisco devices can be configured to respond to all SNMP requests without checking the community name. The is not a problem with the SPECTRUM product.

Cisco Voice Application (SM-CIS1006)

Known Anomalies:

Problem 1: When the Cisco Voice Application is modeled for a Cisco Router, the Cisco Voice Application traps will be recognized incorrectly (as event 0x00010003).

Solution: Add the following lines to <install area>/SS/CsVendor/Cisco_Router/Rtr_Cisco/AlertMap:

```
1.3.6.1.2.1.10.21.2.6.1 0x3250000
                        1.3.6.1.2.1.10.21.1.4.3.1.3(1,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.4(2,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.5(3,0)\
                        1.3.6.1.2.1.2.2.1.8(4,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.1(5,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.2(6,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.6(7,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.8(8,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.9(9,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.12(10,0)\
                        1.3.6.1.2.1.10.21.1.4.3.1.10(11,0)
1.3.6.1.2.1.10.21.2.6.2 0x3250001
                        1.3.6.1.2.1.10.21.1.3.1.1.5(1,0)\
                        1.3.6.1.2.1.10.21.1.3.1.1.6(2,0)\
                        1.3.6.1.2.1.10.21.1.3.1.1.7(3,0)\
                        1.3.6.1.2.1.2.2.1.8(4,0)\
                        1.3.6.1.2.1.10.21.1.3.1.1.3(5,0)\
```

```
                        1.3.6.1.2.1.10.21.1.3.1.1.4(6,0)\
                        1.3.6.1.2.1.10.21.1.3.1.1.12(7,0)\
                        1.3.6.1.2.1.10.21.1.3.1.1.10(8,0)
1.3.6.1.4.1.9.9.63.2.6.1 0x3250002
                        1.3.6.1.4.1.9.9.63.1.4.2.1.1(1,0)\
                        1.3.6.1.4.1.9.9.63.1.4.2.1.18(2,0)
```

Add the following lines to <install area>/SS/CsVendor/Cisco_Router/EventDisp:

```
0x03250000 E 50
0x03250001 E 50
0x03250002 E 50 A 1, 0x03250002
```

The changes will take affect when the SpectroSERVER is restarted.

Copper Mountain Networks

Part Number	Devices	Firmware	Release
SM-CPM1000	CopperEdge 150/200 DSL Concentrators	2.20.61	6.0.3

Corrected Anomalies:

1 The Device icon in the Model Events view now contains a device label, and all menu options are available.

Cabletron CSX200/400

Part Number	Devices	Firmware	Release
SM-CSI1077	CSX200/400	1.03.13 2.01.10	6.0.3
SM-CSI1077	CSX5500, CSX7000		

Known Anomalies:

Problem 1: The fr1315App's Frame Relay Data Link Connection Management table for the CSX200 and CSX400 may incorrectly show the State value as "6." If you double-click on State, the Data Link Connection Management table view shows "???" for the State value.

Solution: This is a firmware problem.

Problem 2: After modeling a CSX5500, 7000, or 9w006/7, and navigating to the WAN Configuration view, segmentation violation messages may appear (depending upon the platform) and the Configuration view disappears.

Solution: This problem will be fixed in a future release.

Problem 3: Changes made to the CtIpOspfApp's SPMA OSPF Neighbor table for the CSX200 cannot be saved, and error messages may appear.

Solution: This is a firmware problem; the CSX200 does not support OSPF.

DBconv Tool ($SPECROOT/SS-Tools)

Corrected Anomalies:

1 When running the DBconv tool to convert a GnSNMPDev to another model type, the device no longer disappears from the Location or Org-Chart view and is no longer placed the Lost and Found after the conversion.

Known Anomalies:

None

Cabletron ELS100-24TXG

Part Number	Devices	Firmware	Release
SM-CSI1064	ELS100-24TXG	2.01.07	6.0.3

Known Anomalies:

Problem 1: The Port Information view for the ELS100_TxG incorrectly displays the Port Speed for ports 25 and 26 as “3.”

Solution: This is a firmware problem that was corrected with firmware version 2.02.01 and greater.

Cabletron EMME/EMM-E6

Part Number	Devices	Firmware	Release
SM-CSI1004	EMME/EMME - Routing	3.08.01 1.01.02	6.0.3
SM-CSI1004	EMM-E6 EMM-E6 ADV	3.22.01 4.01.12	6.0.3

Known Anomalies:

Problem 1: When you attempt to save created entries within the Static Bridging application's Static Bridging Table from the EMM-E6, the following error message may display:

```
Update failed for the following attributes:
Attribute 0x1194c -
Attribute doesn't exist on device,0x200000a
```

Solution: In order for the Static Bridging Table to work correctly, a MacAddr.receiveport entry must be provided. Before pressing the button to create the static database entry, confirm the MacAddr.receive value's existence.

Empire Agent

Part Number	Devices	Firmware	Release
SM-EMP1000	Empire Agent on NT and Unix systems		6.5.0

Known Anomalies:

Problem 1: Some views may not display data associated with the Message Queue Table of the Empire proprietary MIBs. Also, data associated with the clientNFSCalls, clientNFSBadcalls, and clientNFSNclgets attributes of the client NFS statistics and counters MIB branch will not display.

Solution: The Message Queue Table data will be displayed if your devices support such programs as Oracle or other large database systems. The client attributes do not display due to a firmware related issue.

Problem 2: Discovering TokenRingApp for a UNIX host device that has a Token Ring NIC will result in unnecessary alarms being generated on the device model.

Solution: This is a firmware related issue. The Token Ring MIB objects fail some SNMP reads and, hence, alarms are displayed. However, the device model will return to normal after one or two polls.

Enterasys Matrix E5

Part Number	Devices	Firmware Version	Release
SM-ENT1003	5C105, 5H102-48, 5H103-48, 5G106-06, 5 SSRM-02	1.03.00, 1.02.04	6.5.0

Known Anomalies:

Problem 1: An error message displays when you attempt to launch TFTP Download from the CtDownLoadApp Icon Subviews menu for the 5H1xx and 5G1xx devices.

Solution: This functionality is not supported.

Problem 2: Autodiscovering 5H1xx and 5G1xx devices in a chassis creates Fanout connections rather than pipes (because the devices do not establish two-way communication through the backplane).

Solution: This is a firmware related issue.

Cabletron Ethernet Hubs

Part Number	Devices	Firmware Revision	Release
SM-CSI1000	IRBM, IRM-2, IRM-3	1.07.02	6.0.3
SM-CSI1000	IRM-3 BP	2.00.01	6.0.3
SM-CSI1000	MINI-MMAC	2.03.04	6.0.3
SM-CSI1000	MRXI 22/24	1.11.09	6.0.3
SM-CSI1000	MRXI-2E	2.03.02	6.0.3
SM-CSI1000	MRXI-93 SNMP IRM	2.03.02	6.0.3

Known Anomalies:

Problem 1: In the IRBM's Device Topology view, the Edit menu's New Model option does not list LAN802.3 or LAN802.5 models as models that can be created.

Solution: If you wish to connect these types of LAN models to the IRBM ports, exit the DevTop view and create the LAN models at the same topology level as the IRBM, then connect them to the IRBM with pipes. Go back into the DevTop view and drag the resultant Off-Page Reference icons down onto the desired ports.

Problem 2: Generating either the "New MIB Environment Temp Normal Trap" or the "New MIB Environment Voltage Normal Trap" for an IRBM results in an unknown trap alert message in the Event view instead of trap notification.

Solution: There is no solution or work around for the current systems.

Extreme Devices

Part Number	Devices	Firmware	Release
SM-EXT1000	Extreme Summit switches and BlackDiamond 6808 Core Switch	Summit: ExtremeWare 2.1.7, BlackDiamond: ExtremeWare 3.09b4 and Version 5.0 for policy management	6.0.3

Corrected Anomalies:

1 In the DevTop > Interface view, the slot number and port number information is no longer incorrect.

2 When sending traps to an Extreme device, the Event message for some traps is no longer incorrect, since it does display the system description text string.

3 The VLAN ID used by Extreme Summit, BlackDiamond, and Alpine switches are now consistent with other devices configured in a mult-vendor 802.1Q VLAN environment and all users of a single VLAN are listed.

Known Anomalies:

Problem 1: VLAN fault isolation is not supported for Extreme Summit switches running a version of ExtremeWare that is earlier than 6.0.

Solution: VLAN fault isolation will only work with devices running ExtremeWare 6.0 or later due to a need to use extremeVlanStackTable, which is supported in version 6.0 or later. VLAN information is available via the ExtrVlanApp model in the Application view.

Problem 2: VLAN information may not be accessible from the VLAN List menu selection in the Device Topology view.

Solution: The VLAN information is available via the ExtrVlanApp model in the Application view. It is not available from the Device Topology view

because VLAN information is not supported for Extreme Summit switches running a version of ExtremeWare that is earlier than 6.0.

Problem 3: SPECTRUM AutoDiscovery will connect an Alpine 3808 running firmware 6.1.7 and a Summit 48i running 6.1.8 using EDP but will not connect them to any non-Extreme devices.

Solution: For these devices running these particular firmware versions to get connected to non-Extreme devices, you must Telnet to each Extreme device and enable the dot1d MIBs. This is not necessary if you upgrade the firmware to Extremeware 6.2 because it uses a proprietary MIB for connectivity.

F5 Networks

Part Number	Devices	Firmware	Release
SM-F5N1000	F5 BigIp Load Balancer family	3.1.1	6.0.3

Corrected Anomalies:

1 Several views accessed from the BigIpApp icon no longer have the Description field red boxed.

Known Anomalies:

Problem 1: The Interface Configuration view displays fields that are red boxed.

Solution: This is a firmware related problem.

Problem 2: The F5 BigIP Load Balancer device model does not register trap events and alarms.

Solution: This is a firmware issue, i.e., the device does not properly implement the ipAddrEntry MIB table in accordance with RFC 2011.

Cabletron FDM

Part Number	Devices	Firmware	Release
SM-CSI1012	FDMMIM FDMMIM-04	4.07.06	6.0.3

Known Anomalies:

Problem 1: There are no statistical reports being generated for the BdgCSIFDM icon.

Solution: Run the reports on the applications for the HubCSIFDDI icon to review the statistical information; the statistical reports function as designed.

Problem 2: When you enter “Delete-on-Reset” or “Delete-on-Timeout” in the Static Database Table, it does not appear, although it does appear in the CT_Tp_App Table, Transparent Bridge Information Table, and Forwarding Database Table. Due to this entry not being in the Static Table, you cannot change the status or use “Invalid” to remove the entry.

Solution: You must reset the FDM or use local management in order to remove the entry. This is a firmware related problem.

Problem 3: In the Device Topology view of the BdgCSIFDM, the Simplified Device view shows the FDM in slot 2, regardless of its true position within the chassis.

Solution: This is a firmware problem. Once the model has been resolved to the appropriate place in an EMME or IRM chassis, the FDM model will appear in the correct slot within both the FDM and EMME/IRM Device views.

FlowPoint and SSR DSL Devices

Part Name	Devices	Firmware	Release
SM-CSI1096	FlowPoint 128, 144, 2025, 2100, 2200, and SSR 130, 140, 150, 245, 250, 255, 265		6.0.3

Known Anomalies:

Problem 1: For Generic_SSR_FP models, the Interface Device view's Console Interface (#3) shows "???" on the Interface Type label.

Solution: This is a firmware problem.

ForeRunner Series of ATM Switches

Part Name	Devices	Firmware	Release
SM-FOR1000	ASX-100, ASX-200, 9A000, ASX-1000, ASX-4000	5.3.1	6.0.3

Known Anomalies:

Problem 1: Some fields for ASX and OC3 models are red-boxed in the Application Port view (accessed from the Application Configuration view's Port Table).

Solution: The Management Module functions as designed. This is a firmware problem.

Problem 2: Areas within the Forerunner's Performance, Detail, and More Detail views are red-boxed.

Solution: This is a firmware problem.

Problem 3: If you try to use the Find view to find the Fore_SONET_App by Model type, the lower portion of the Device view is blank or shows incorrect information.

Solution: Do not use the Find view for this purpose; use the conventional methods of accessing the Device view.

Problem 4: Attempts to model a ForeSwitch as a GenSNMPDev show the model type as a ForeSystems Workstation, eventually changing to a ForeSys RT router model type. After navigating into the Device Topology or the Application views, ForeUserApp icons appear within the views.

Solution: This is a firmware problem

Problem 5: A yellow alarm occurs if multiple ForeWorkstations are modeled in SPECTRUM. The alarms only appear on ForeWorkstation models using an older (previous) version of the Fore adaptor card.

Solution: Install a later version of FORE's ATM adapter card software.

Foundry Network Devices

Part Number	Devices	Firmware	Release
SM-FDR1000	ServerIron, NetIron, BigIron, FastIron, TurboIron	07.0.10T53	6.0.3

Corrected Anomalies:

1 Red boxes no longer appear in several fields in the Chassis General Information view.

Known Anomalies:

Problem 1: Red boxes appear around the Last Change and Queue Length fields in the Interface Configuration view, which is accessed by double-clicking an entry in the Interface Configuration table.

Solution: This is a firmware related issue.

Generic Host Module

Part Name	Devices	Firmware	Release
SM-GHO1000	Host_Compaq, Host_Device, Host_Sun, Host_Empire	N/A	6.5.0

Known Anomalies:

Problem 1: The mechanism for changing the community name on a Host_Sun model does not function properly. Only the community name supplied during model creation is used to communicate with the Sun Management Center (SMC).

Solution: If the community name is changed on the SMC, the corresponding SPECTRUM model will need to be destroyed and recreated with the new community name. This problem will be addressed in a future release.

Generic SNMP Devices

Part Name	Devices	Firmware	Release
SM-CSI1017	Generic SNMP	N/A	6.0.3

Known Anomalies:

Problem 1: When some devices are modeled as GnSNMPDev, the Topology view may show the GnSNMPDev models with incorrect name labels.

Solution: Generally, this label on the GnSNMPDev model type denotes the name of the manufacturer that initially wrote the firmware. The Management Module functions as designed.

Host Compaq Module

Part Name	Devices	Firmware	Release
SM-CPQ1000	Host Compaq	N/A	6.0.3

Known Anomalies:

Problem 1: The SNMP Agent Detail View is not showing statistical information. Also, the view's Auth Trap field and the Detail 2 view's Receive Breakdown and Transmit fields are red-boxed. Changing the Auth Traps from disabled to enabled causes an attribute error message to appear.

Solution: This is a firmware problem. Compaq Server's SNMP2_Agent does not fully support MIB-II.

Juniper Networks

Part Number	Devices	Firmware	Release
SM-JPR1000	M20, M40, M160 Internet Backbone Routers	JUNOS 4.0R1.2	6.0.3

Known Anomalies:

Problem 1: Juniper Internet JUNOS may send OSPF traps SNMP Version 1 with a non-standard specific trap number. Traps will be sent with a specific trap number of 9-24, which should be 1-16. As a result, SPECTRUM will show these traps as UNKNOWN to the Juniper Model or will display the wrong Event/Alarm.

Solution: This is a firmware related issue.

Problem 2: Juniper Internet JUNOS may send Juniper MPLS traps SNMP Version 1 with a generic trap number of 0. This should be a 6. As a result, SPECTRUM will show these traps as UNKNOWN to the Juniper Model.

Solution: This is a firmware related issue.

Problem 3: Juniper Internet JUNOS 4.2 may not populate the table entry ifStackStatus OID: 1.3.6.1.2.1.31.1.2.1.3. As a result, subinterfaces will not be correctly mapped; thus, all subinterfaces will show up in the Device Interface and Device Topology views.

Solution: This is a firmware related issue.

Problem 4: Juniper Internet JUNOS returns incorrect next hop information from RFC 2096 MIB object ipCidrRouteNextHop. This will cause Autodiscovery to produce one of the following effects: partial connection of neighboring network device models or total failure to connect neighboring network device models.

Solution: This is a firmware problem.

Kentrox DataSMART

Part Number	Devices	Firmware	Release
SM-KEN1001	Kentrox, DataSMART_680, DataSMART_688	1.43	6.0.3

Corrected Anomalies:

1 The Kentrox DSU/CSU interface DLCI_Ports for Frame Relay no longer show a value of “???”.

Known Anomalies:

Problem 1: Several views for the Kentrox DataSMARTApp contain red-boxed attributes.

Solution: This problem occurs because the device is not returning any values for these attributes. The Management Module functions as designed; this is a firmware problem.

Problem 2: In the DataSMART 688 model, the DLCI_port (subinterface dcz of T1 port) in the Device Interface view displays “???” instead of a valid value.

Solution: This is a firmware related problem.

Motorola Vanguard

Part Number	Devices	Firmware	Release
SM-MOT1000	6520, 6560, 320		6.0.3

Known Anomalies:

Problem 1: The Bridge Traffic view displays blank fields.

Solution: This a firmware issue.

Problem 2: The DLCMI Table, which is accessed from the RFC1315App Icon Subviews menu, shows the Multicast field as having value of `0,` and when you double-click any value in the table to bring up the detail view, the value ??? displays for the Multicast field.

Solution: This a firmware issue.

Nokia Firewall

Part Number	Devices	Firmware	Release
SM-NOK1000	Nokia Firewall family	3.2.1	6.01

Corrected Anomalies:

1 The Checkpoint App's name no longer appears as "7" in the Application view when it is in the List mode.

Known Anomalies

None

Packeteer PacketShaper

Part Number	Devices	Firmware	Release
SM-PKT1000	Packeteer Family	4.2.0	6.0.3

Corrected Anomalies:

1 There are no longer red boxes around the Description field in the Partition table accessed from the PSCommonApp Performance view.

2 The `userEventTrapThreshold` variable now passes properly for a `psAlarmUserEvent`.

Known Anomalies:

Problem 1: The Performance view displays incorrect load values.

Solution: This is a firmware issue.

Paradyne FrameSaver

Part Number	Devices	Firmware	Release
SM-PRD1000	FrameSaver		6.0.3

Known Anomalies:

Problem 1: The Alarm Relay Cutoff field in the Configuration view accessed from the PdnCommonApp Icon Subviews menu may be red boxed.

Solution: This a firmware issue. The attribute value may not be present in the MIB. Use the SPECTRUM MIB Tool to see if it is.

Riverstone SmartSwitch Router

Part Number	Devices	Firmware	Release
SM-RST1000	RS-32000, 38000 RS-8600, 8000, 3000, 2100, 2000 IA-1100, 1200	See below	6.5.0

Known Anomalies:

Problem 1: Riverstone SmartSwitch Routers with MPLS boards configured and firmware 8.0.0.8 installed do not report the Operational Status as **down** and the Administrative Status as **off** for port interfaces that are configured to be **up** and **on**.

Solution: This problem does not occur with firmware release 8.0.2.0. You may ping these routers with the IPs of those interfaces and when you Telnet to each router, you will see that those interfaces have been configured to be **up** and **on**.

RMON Application

Known Anomalies:

Problem 1: A search for RMONApp, RMONEthProbe, or RMONTRProbe results in icons with inconsistent menu picks as compared to the Topology menu picks.

Solution: This will not be changed.

Problem 2: There may be problems with window displays associated with RMON statistics errors. Multiple windows may appear and/or error messages may occur.

Solution: This is an issue related to the firmware and MIB.

RMON Management Module

Part Number	Devices	Firmware	Release
SM-CSI1014	Remote Monitoring	N/A	6.0.3

Known Anomalies:

Problem 1: After launching the RMON Suite from the command line of a Cisco Frontier Switch Probe modeled as GnSNMPDev, MAC addresses in the Host Matrix table appear incorrectly. Also, the wrong MAC addresses for the source and destination appear in the Matrix Source to Destination view, and incorrect MAC destination addresses appear in the Matrix Destination to Source Destination view.

Solution: The Cisco Frontier Switch Probe is not handling SNMP getnext requests properly; this is a firmware problem.

Problem 2: When using RMON and the RMON Suite, when you click the Guide button, and error message says that the rmon.pdf documentation is not installed.

Solution: Install the documentation.

Enterasys RoamAbout Wireless

Part Number	Devices	Firmware	Release
SM-ENT1002	Enterasys RoamAbout Wireless LAN System	N/A	6.5.0

Known Anomalies:

Problem 1: The following error message displays when accessing the Static Table off the Static Application in the Application view.

`Unable to read all attributes from model. Some fields may not be displayed`.

Solution: This is a firmware related issue.

Problem 2: Red boxes may appear on some fields displayed in views accessed from the DECElanApp application.

Solution: This is a firmware related issue. The RoamAbout device only partially supports the DEC Elan MIB, so some of the OIDs from this MIB do not return data to SPECTRUM.

Cabletron SEHI Hubs

Part Number	Devices	Firmware	Release
SM-CSI1020	SEHI, (Stackable Hub), SEHI-22, SEHI-24, SEHI-32, SEHI-34	1.10.04	6.0.3

Known Anomalies:

Problem 1: When you highlight a port in the Device view and choose Port Frame Size & Protocols from the Icon Subviews menu, the view that displays has Frame Size information only.

Solution: Port protocols are not supported by the SEHI device and will, therefore, not show up in the view.

Cabletron SFSmartCell Switch

Part Number	Devices	Firmware	Release
SM-CSI1073	SmartSwitch 9A656_04 SmartSwitch 9A686_04	2.04.09	6.0.3

Known Anomalies:

Problem 1: The SFCS device's Interface Configuration Table view's Clocking to Mother Board field is empty, and the same field in the SFCS Interface Configuration view is red boxed for devices using the 02.02.03 firmware.

Solution: This is a firmware related issue.

Problem 2: AutoDiscovery does not resolve the port connection for the 9A656-04. Although you may see a connection between the switches, you will need to resolve the port manually.

Solution: To find the port, read the atmInterfaceMyNeighborIpAddress and atmInterfaceMyNeighborIfName from the ATM MIB. (Not all devices fill in atmInterfaceMyNeighborIfName with the port number.) The devices should show atmInterfaceMyNeighborIfName with the port number, and not the ifDescr value. This attribute is read-write; you can change this name to another interface name. This way, you can show two ports on one switch connected to two ports of another switch.

Problem 3: The ANIM Configuration view incorrectly identifies a 3-port 155Mbps SC ANIM as a 2-port 622Mbps SC ANIM.

Solution: This is a firmware related issue.

Cabletron SmartSwitch 2000 Family

Part Number	Devices	Firmware	Release
SM-CSI1068	2Exx-xx	4.09.08	6.0.3
SM-CSI1080	2H2x-xxx, 2H3x-xxx	4.09.08	6.0.3
SM-CSI1087	2M46-04R, 2M46-04RDC	4.09.08	6.0.3

Corrected Anomalies:

1 When an ATM HSIM is installed in a SmartSwitch 2000 device and the Application Display is set to Bridging, the interface label for the ATM HSIM in the Device Chassis view used to incorrectly display “UNK” instead of “FWD” for the ATM connection. This now works properly for SPECTRUM 6.5.0 and firmware 4.11.08.

Cabletron SmartSwitch 6000 Family

Part Number	Devices	Firmware	Release
SM-CSI1076	6E122-26, 6E123-26, 6E123-50, 6E128-26, 6E129-26, 6E132-25 6E133-25, 6E133-37, 6E133-49, 6E138-25, 6E139-25 6E233-49	4.01.10	6.0.3
SM-CSI1082	6H122-08, 6H122-16, 6H123-50, 6H128-08, 6H129-08, 6H133-37 6H202-24, 6H252-17	4.01.10 1.01.10 1.01.10	6.0.3
SM-CSI1088	6M146-04	4.01.10	6.0.3

Known Anomalies:

Problem 1: Attempts to create a 6E 123-50, 6H 133-37, 6E138-25 or 6E128-26 model by IP or through AutoDiscovery result in the model appearing as a gen6000 device. Attempts to model the 6E138-25 by model type result in the wrong model type alarm messages.

Solution: This is a firmware problem.

Problem 2: In the Chassis Device view's Physical Application Display view for the 6E123-50 and 6H133-37, selecting Port Display Form's Speed menu choice then selecting the Repeater Port Display Form's Speed menu choice causes a value of INV (Invalid) to appear for ports.

Solution: The Port Display Form speed of 10 mb is correct. The Repeater Port Form speed menu is incorrect.

Cabletron SmartSwitch 9000 Dual Backplane

Part Number	Devices	Firmware	Release
SM-CSI1098	9C114, 9C106		6.0.3

Corrected Anomalies:

1 Duplicate models no longer cause erroneous yellow alarm conditions to appear in any SmartSwitch 9000 chassis.

Cabletron SmartSwitch 9000/9500

Part Name	Devices	Firmware	Release
SM-CSI1030	9E13x-xx	2.06.10	6.0.3
SM-CSI1031	9F116-01	2.00.06	6.0.3
SM-CSI1032	9F1xx-xx, 9F2xx-xx	2.00.10	6.0.3
SM-CSI1035	9F4xx-xx, 9F31x-xx	1.12.05, 6.00.15 1.00.30	6.0.3
SM-CSI1036	9E3xx-xx 9E4xx-xx	1.12.05	6.0.3
SM-CSI1038	9T122-xx 9T125-xx	1.08.07, 1.02.17	6.0.3
SM-CSI1055	9E106-06	2.10.06	6.0.3
SM-CSI1059	9A128-01 9A426-xx	2.10.17 5.00.08	6.0.3
SM-CSI1066	9H42x-xx	1.12.05 3.01.06	6.0.3
SM-CSI1073	9A656-04, 9A686-04	3.00.04	6.0.3
SM-CSI1074	9G42x-xx	1.12.05	6.0.3
SM-CSI1083	9T425-16, 9T428-16, 9T427-16	1.12.05	6.0.3
SM-CSI1092	9M426-02	2.01.02	6.0.3
SM-CSI1098	9E5xx-xx, 9G5xx-xx, 9H5xx-xx	1.02.09	6.0.3

Common Anomalies - SmartSwitch 9000/9500

The following affect two or more Management Modules and the associated devices.

Corrected Anomalies:

1 The port interfaces in Device Topology and Device views now appear after modeling a 9E312_12 device. Twelve interface ports appear in the views. Also, the Model Information view no longer displays the model state value as "Error."

Known Anomalies:

Problem 1: Currently, you can create SmartSwitch 9000 models in Location or Organization views, even though a Contains relation cannot be established with the SmartSwitch chassis model, and the models do not show up in the Device view of the SmartSwitch.

Solution: Do not create any SmartSwitch 9000 models in the Location or Organization views; instead create the model in the Topology view and then copy the device icon from the Universe Topology view into the Location view. The SmartSwitch chassis model has a Container view which contains Location view icons for all modeled SmartSwitch modules. This ensures that the proper relationship between the models exists.

Problem 2: 9E42x-x and 9H42x-xx device Transparent Bridging Port tables show no MIB-II Interface statistic for INB interfaces for Port In Frames, Port Out Frames, and Port In Discards.

Solution: This will be addressed in a future release.

Problem 3: When modeling a 9A6x6 as a standalone, the Chassis Device view incorrectly displays the backplane interfaces.

Solution: This is a firmware issue; upgrade to firmware 3.00.04 or later.

Problem 4: Error messages may appear when you attempt to save created entries within the Static Bridging application's Static Bridging Table. This

only happens with some SmartSwitch 9000 modules; for example; the 9E133-36, 9E138-36, 9E423-24, and 9F310-02 SmartSwitch models display the following:

```
Update failed for the following attributes:

Attribute 0x1194c - Attribute doesn't exist on
device,0x200000a
```

Solution: In order for the Static Bridging Table to work correctly, a "MacAddr.receiveport" entry must be provided. Then, click the Create Static Database Entry, confirm the"MacAddr.receive" value's existence, click Close, and click Save again. This saves the MAC address as a Static Database Entry, and the error message will not appear.

Problem 5: For the 9T125_08 and 9T122_24, the CsTRing1App's Cabletron Token Ring Configuration View shows ?? within the Beacon State field.

Solution: This is a firmware problem.

Problem 6: You may have difficulty creating (and removing) PVCs and PVPs from SmartCell, 9A656_04, and 9A686_04 devices.

Solution: Use the Virtual Channel views available for your device to create PVCs, and the Virtual Path views to create PVPs. The creation procedures are the same. Creating a PVC involves defining individual links (VPI/VCI) on each of two ports and then cross connecting the ports. You use a virtual channel link view to define the links on each port and then use a cross connect view to cross connect the ports. Check the following before you begin: you must have write privileges for the device; the traffic parameters for the ports must be set properly; and the ILMI parameters must be set. (Use local management to do this.) The following summarizes the creation procedure using a Zeitnet device. The procedure will be similar for the other devices.

1 In a Virtual Channel Link view, set the link information (IF Index, VPI, and VCI). For example, **`20101.0.160`**.

2. Save the link by pressing <Return> and then clicking the **Create Link** button. The VCL Row Status view displays.
3. Assign traffic parameters for transmit and receive and then click <Return> to save.
4. Click the **Validate Row** button and then wait to see that the row status changes from `Not Ready` to `Active`.
5. Return to the Virtual Channel Link Table view to validate that the link was defined with the assigned traffic parameters.
6. That completes the link definition for the first port to be cross connected. Now repeat the above steps to complete the link definition for the other port.
7. When the links are defined correctly for both ports, go to the Virtual Channel Cross Connect view and follow the instructions in this view to cross connect the two ports for which you defined links. Cross connecting establishes the PVC.
8. You should return to the Virtual Channel Link view to ensure that the PVC has been set properly.

Problem 7: When the Community Name is changed in the Model Information view of a SmartSwitch 9000 device, the interfaces in the Chassis Device view do not display a status change but remain in whatever state they were in when contact was lost with the device.

Solution: The interface number field turns gray to alert you that contact was lost; however, knowing the previous state of the interface is considered to be useful information.

Problem 8: The graph in the ATM Performance view seems to display information incorrectly. For example, the Log and Lin graphs may appear to show 100% of capacity when the cell rate exceeds a certain value.

Solution: This problem comes about because the graph is used to show both percentages and rates and has a limitation as to the total cell rate that can be depicted in the graph. Percentages obviously do not exceed 100% and the rates on the other hand have a multiplier associated with them

(noted by an asterisk next to the attribute). When the cell rate exceeds the graph's ability to show actual value, the % line will appear flat on the graph. The actual tick for tick value of the rate is shown in the table beside the graph.

SmartSwitch ATM - Zeitnet Switch

Part Number	Devices	Firmware	Release
SM-CSI1085	SmartSwitch 2500 (former ZX-250) SmartSwitch 6A000 (ATM module) SmartSwitch 9A100 (ATM module) SmartSwitch 6500 (ATM backbone)	2.04.09	6.0.3

Known Anomalies:

Problem 1: In the Device Topology view for the ZX_250 model type, the Port Load Status field is blank.

Solution: This is a firmware problem.

Problem 2: PVC links, cross connections, paths and channels cannot be created on a on a Zeitnet device. This happens with the 9A100 or SmartSwitch 6500 with the Write community name and the trusted NMS address set correctly.

Solution: This problem will be addressed in a future release.

Problem 3: The Zeitnet System Information view for the SmartSwitch 6500 displays red-boxed fields.

Solution: This is a firmware problem.

Problem 4: For the Zeitnet devices, some interfaces within the Interface Device and Device Topology views show incorrect IP or MAC addresses.

Solution: This is a firmware problem.

Problem 5: The ZX_250 Switch Application Port view shows the Number of Ports field as “7”, while the Port table displays eight rows of port data.

Solution: This is a firmware problem.

Problem 6: Modeled 6Exxx cards (with the ZX-250 SW_Link) do not provide Port Performance view statistics. The “Device not configured” error

message appears instead, or the Performance view shows red-boxed attributes.

Solution: This is a firmware problem. Upgrade to the SmartSwitch 6500 with 2.4 firmware, which provides the MIB-II performance parameters. Set Primary Application to MIB-II; launch the Performance view from the device model.

Problem 7: In the ATM Switch Application Virtual Path Links table view for the SmartSwitch 2500/ZX_250SwitchApp, the Admin Status field shows a “0” value. Double-clicking any table entry displays the ATM Switch Application VPL table view, showing the Admin Status field with a “???” value. In both views, the device should return a “1” value for Up, or “2” for Down.

Solution: This is a firmware problem.

Problem 8: The ZX250SwitchApp for the SS6500_CSM is displaying some red-boxed fields in the Switch Memory/Heap Stats view firmware 2.04(9).

Solution: This is a firmware related problem.

Problem 9: The ZX_250 Switch application’s Configuration view shows red-boxed fields.

Solution: This is a firmware related problem.

Problem 10: The SmartSwitch 6500’s Zeitnet Systems Extensions view shows red-boxed fields.

Solution: This is a firmware problem for the SmartSwitch 6500; the field attributes are not supported.

Problem 11: You will be unable to update the Admin Status of an active port of an 9A100 device in the Application view > Large Icon > Device Interface view > IF Configuration view. An error message will be displayed.

Solution: This is a firmware related problem.

Problem 12: The 6A000 model may display “Failure” or no values in some of the fields in the Gen_IF_Port Performance view.

Solution: This is a firmware related problem.

Problem 13: Launching the Circuit view off a VCL model that is part of a Permanent Virtual Circuit that terminates at a Zeitnet CPU at both ends will result in a SpectroSERVER crash.

Solution: Avoid the above configuration.

SmartSwitch FDDI

Part Number	Devices	Firmware	Release
SM-CSI1035	SmartSwitch 9F426_02 SmartSwitch 9F426_03 SmartSwitch 9F310_02	1.06.09	6.0.3

Known Anomalies:

Problem 1: In the Interface Device view of a 9F426-02, three possible interfaces can appear. One is the INB interface and the others are FDDI interfaces. The FDDI interfaces can be Front Panel 1 and Front Panel 2, Front Panel 1 and FNB, or Front Panel 2 and FNB. However, if one panel is the FNB, the view does not identify which one.

Solution: You can find the desired internal connections information by opening the Utilities > Applications > FNB Configuration view and find the desired FDDI information via the FddiMACApp icon in the Applications view.

SmartSwitch Router (SSR)

Part Number	Devices	Firmware	Release
SM-CSI1091	SSR 32000, 8600, 8000, 3000, 2100, 2000, 1200, and IA-1100		6.0.3
SM-ENT1005	X-Pedition 8600, 8000, 2100, 2000, and ER16		6.0.3
SM-RST1000	RS 32000, 8600, 8000, 3000, 2100, 2000, 1200, and IA-1100		6.0.3
SM-ENT1001	6-SSRM-02		6.0.3
SM-TRN1000	BE2xx, TL1000, and TLGateway		6.0.3

Corrected Anomalies:

1 LANs are now created when you run AutoDiscovery using the SmartSwitch Router as the seed router.

2 Red boxes no longer appear in the Configuration and Performance views of rfc2338App.

Known Anomalies:

Problem 1: The Port Performance view for the SSR8000 incorrectly shows in_error and error_rate values of 100%. The value should be 0 when no connection exists.

Solution: This is a firmware problem.

Problem 2: After you run a router discovery on SSR's with firmware 3.0, connections to interfaces on the SSR do not become resolved.

Solution: Manually model the connections to each router.

Problem 3: Serial interfaces for the SSR8600 incorrectly show "10000000" for the ifSpeed.

Solution: This is a firmware problem.

Problem 4: Fast Ethernet ports are not being created in the Application view. Only the RMONEthProbe on the Ethernet ports appear.

Solution: RMON probes are not created for Gigabit Ethernet ports. Gigabit interface types are currently not supported by Rmon code and therefore are not modeled as RMONEthProbes.

Problem 5: The VRRP Configuration view (rfc2338App) displays red boxes on certain fields.

Solution: This problem may be fixed in a future release of SPECTRUM.

Problem 6: For devices running the 8.0.1.0 firmware, the Chassis view does not display port or chassis models.

Solution: This is a firmware related problem.

SmartSwitch FDDI MicroLAN Switches

Part Number	Devices	Firmware	Release
SM-CSI1095	STS16 Token Ring (formerly Olicom TR16)	3.1.0	6.0.3

Corrected Anomalies:

1 AutoDiscovery now places the concentrator boards in the container view of the 9F12x-xx or 9F241-12.

Sun Management Center Agent

Part Number	Devices	Version	Release
SM-SUN1000	Workstations and servers supported by the Sun Management Center Agent	3.0	6.0.3

Known Anomalies:

Problem 1: The fields in some SPECTRUM views that support the MIB-II SNMP group may not display any values. For example, this may occur in the Performance Detail view.

Solution: This problem results from the fact that Sun Microsystems provides two versions of MIB-II support with the Sun Management Center agent. One version is called MIB-II System (Simple) and loads automatically. This version only supports the System, Interface, and IP groups. A second version is called MIB-II Instrumentation and is part of the Advanced Systems Monitoring package. This version supports the System, Interface, IP, ICMP, TCP, and UDP groups and requires a license key from Sun Microsystems to run it. This support for MIB-II is a change from Sun's default agent, snmpdx, which seems to support all of the groups in MIB-II.

Problem 2: The fields in some of SPECTRUM's views may contain zeros instead of valid values.

Solution: During the installation and setup of the Sun Management Center agent, some MIB OID branches may load branch points other than what is stated in the respective MIB file. This problem is being addressed by Sun Microsystems.

Problem 3: The buttons **NFS FileSys**, **File Scan Grp**, and **VXFS FileSys** contained on views accessible from the Host System Health option on the Sun Host device Icon Subviews menu may not be available for use.

Solution: These buttons will be available if the device has the associated file systems installed or mounted.

Problem 4: The button process statistics contained on views accessible from the Host System Health option on the Sun Host device Icon Subviews menu may not be available for use.

Solution: This button will be available if Advanced Systems Monitoring (ASM) is installed in the agent.

SynOptics 5000 Hubs

Part Number	Devices	Firmware	Release
SM-SYN1003	53xx Enet 55xx TR 59xx FDDI	1.5.1 1.5.1 2.2.6	6.0.3
SM-SYN1007	SynOptics D5xxx	1.5.0	6.0.3

Corrected Anomalies:

1 In the Configuration view for the HubSyn5xxx model, Chassis Contact and Chassis Location MIB objects are read-write on the device and they can now be set with SNMP.

2 The SM-SYN1003 Management Module now supports the 5005 chassis.

Known Anomalies:

Problem 1: SynOptics only counts Good Frames when monitoring Ethernet traffic. As the number of frames with errors goes up, the number of Good Frames goes down, and this directly affects the Load value in the Port, Segment, Cluster, and Attachment Performance views.

Solution: This is an agent problem. Users must evaluate the %Errors in the Performance views and know that when the %Errors goes up, the Load displayed does not reflect the actual load on the Ethernet segment.

Problem 2: Opening certain SPECTRUM views may cause link error messages to appear in the SpectroGRAPH window. These messages will not affect the operation of SPECTRUM.

Solution: This problem will be addressed in a future release.

Problem 3: Traps are only generated against the IP address of the first Data Collection Engine (DCE) on an Ethernet or Token Ring Network Management Module (NMM). If contact is lost with the first DCE, the user will not receive traps.

Solution: This is a firmware problem.

Problem 4: In the Device view, TR DCE icons may disappear and the NMM Module menu selections will change to a default (Module Notes and Module Configuration.)

Solution: This is a firmware problem where the TR NMM is rebooting and the TR NMM entry disappears from the device's module table.

Problem 5: Information deleted from the Config File Name and/or Image File Name fields in the DCE Agent Configuration view reappears in the view after the view's next poll cycle.

Solution: Replace the entries to be deleted with null characters or blank spaces. This is a firmware problem.

Problem 6: In the Ring In/Ring Out Extension Information view, the Ring In UNA and the Ring Out UNA may be "0.0.0.0.0.0," or both values may be the same.

Solution: This is a firmware problem.

Problem 7: Attempts to change all Module Ring attachments and Module Ring Speed for all attachments in a TR Module Configuration view fail when done simultaneously during the editing session.

Solution: Change the Module Ring Attachments first followed by the Module Ring Speed, or vice versa. Do not attempt to change both at the same time. This is a firmware problem.

Problem 8: The HubSyn5DNxx does not appear in the Topology view when modeled by IP.

Solution: Exit the Edit mode; the model will then appear in the Topology view. The recommended method is to model the HubSyn5DNxx using the "by Model Type" option.

Problem 9: The Performance views accessed for the HubSyn5xxx may show red boxes.

Solution: This may be fixed in a future release.

SynOptics Modules

Part Name	Devices	Firmware	Release
SM-SYN1001	HubSyn3FDDI (SynOptics 3000)	5.1.0	6.0.3
SM-SYN1002	HubSynEnet28xx(SynOptics 28xx)	5.3.1	6.0.3
SM-SYN1004	SynOptics 332xS (Enet Bridge)	1.0.0	6.0.3
SM-SYN1005	SynOptics 39xx (FDDI)	2.0.48	6.0.3
SM-SYN1006	SynOptics 28xxx	2.0.3	6.0.3
SM-SYN1008	HubSyn27xx (SynOptics 27xx)	5.11	6.0.3
SM-SYN1009	HubSyn29xx (SynOptics 29xx)	2.2.4	6.0.3

Corrected Anomalies:

1 Red-boxed fields no longer display in the HubSyn3FDDI's Port Profile view.

Known Anomalies:

Problem 1: For SynOptics 3xxx and 28xx Hubs modeled with the GnSNMPDev model type, the Gen_IF_Port application Performance view shows inaccurate statistics.

Solution: This problem will be addressed in a future release.

Problem 2: The 3000 Series chassis has one Ethernet backplane, which can be broken into multiple segments so that more than one Network Management Module (NMM) can exist in the same chassis. HubSynSer3xxx Device views show all the Ethernet modules on the chassis instead of just the modules on the segment. Only the modules on the segment, however, have port information and configuration capability.

Solution: This problem will be addressed in a future release.

Problem 3: For the BdgSyn332xS model type, the Syn3EBdgApp's Ethernet Local Bridge Filter Table Entry Configuration view shows an "Update Failed" error message when you attempt to edit the Mac Address or Disposition values.

Solution: Mac Address and Disposition are read-only in this view; do not attempt to change these fields. This will be addressed in a future release.

Problem 4: The statistics in the SynOptics Port Performance view may not be completely accurate.

Solution: This problem is related to firmware.

TRMM and TRMMIM Token Ring Modules

Part Number	Devices	Firmware	Release
SM-CSI1023	TRMM	3.01.06	6.0.3
SM-CSI1025	TRMMIM, TRMMIM-1	3.01.01	6.0.3

Corrected Anomalies:

1 The TRMM now recognizes Router CRM-3T models and they appear in the Device Topology view.

TRMM-2 and TRMM-4 Token Ring Modules

Part Number	Devices	Firmware	Release
SM-CSI1040	TRMM-2	2.00.03	6.0.3
SM-CSI1041	TRMM-4	2.00.03	6.0.3

Corrected Anomalies:

1 If the HubCSITRMM2 is used as a monitor point for the 802.5 LAN, the SystemUpTime and Ring Speed are no longer 0, and statistical data is calculated.

Xylogics Terminal Server II

Part Number	Devices	Firmware	Release
SM-XYL1001	Annex3, Annex3-UX	11.0	6.0.3

Known Anomalies:

Problem 1: For Xyl_CSMIM and Xyl_AnnexII models of devices with firmware versions less than 9.0, the serial number fields in the Device and Application views remain empty.

Solution: For versions 9.0 and greater, all views have been updated to support the serial number field.

Wellfleet Routers

Part Number	Devices	Firmware	Release
SM-WEL1003	Wellfleet Router 2	14.0	6.0.3

Known Anomalies:

Problem 1: For Rtr_Wfleet models of devices with firmware 7.56 and 7.57, the Configuration view's Console Configuration field is red-boxed.

Solution: Firmware 7.80 replaces firmware 7.56 and 7.57; correct information displays with the newer firmware.

Problem 2: In the Performance view of the wfBridgeApp, the Value column fields read FAILURE.

Solution: This occurs on devices with firmware version 8.0. The most current devices use version 12.0, which does not have the problem.

Problem 3: For Rtr_Bay_Wfleet models of devices with firmware 8.0 and older, the wf01VinesApp's Configuration view fields are red-boxed.

Solution: This is a firmware problem.

Problem 4: The DCLI ports on the Rtr_Bay_Wflet do not model appropriately when you migrate SPECTRUM from any 5.0rev1 release or greater to any 6.X release. This is because the Create_Sub_Interfaces attribute is set to FALSE by default on the earlier releases and when migrating to 6.X releases, the default value is preserved.

Solution: To set the Create_Sub_Interfaces attribute to TRUE, select the **Redundancy/Discovery** button in the Configuration view to bring up the Redundancy/Discovery Control view, toggle **Create Sub Interfaces** to **TRUE**, and select **File > Save All Changes**.

SPMA (SPECTRUM Portable Management Applications)

Known Anomalies:

Problem 1: Some of the SPMA applications create/use files to store user-defined information. These files are placed in the directory pointed to by the environment variable CTRONDB. By default, the script used to launch SPMA applications sets the CTRONDB variable to:

```
{Install Directory}/SPMA/db directory
```

The retrieved files are owned by the first person to use the SPMA applications. Subsequent changes by other users will not be saved because they do not have write permission to those database files. Only the creator of those files can modify them.

Solution: CTRONDB functions as designed. You can set the environment variable CTRONDB to point to some location other than the default location before bringing up SpectroGRAPH. This will allow you to modify the retrieved files.

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